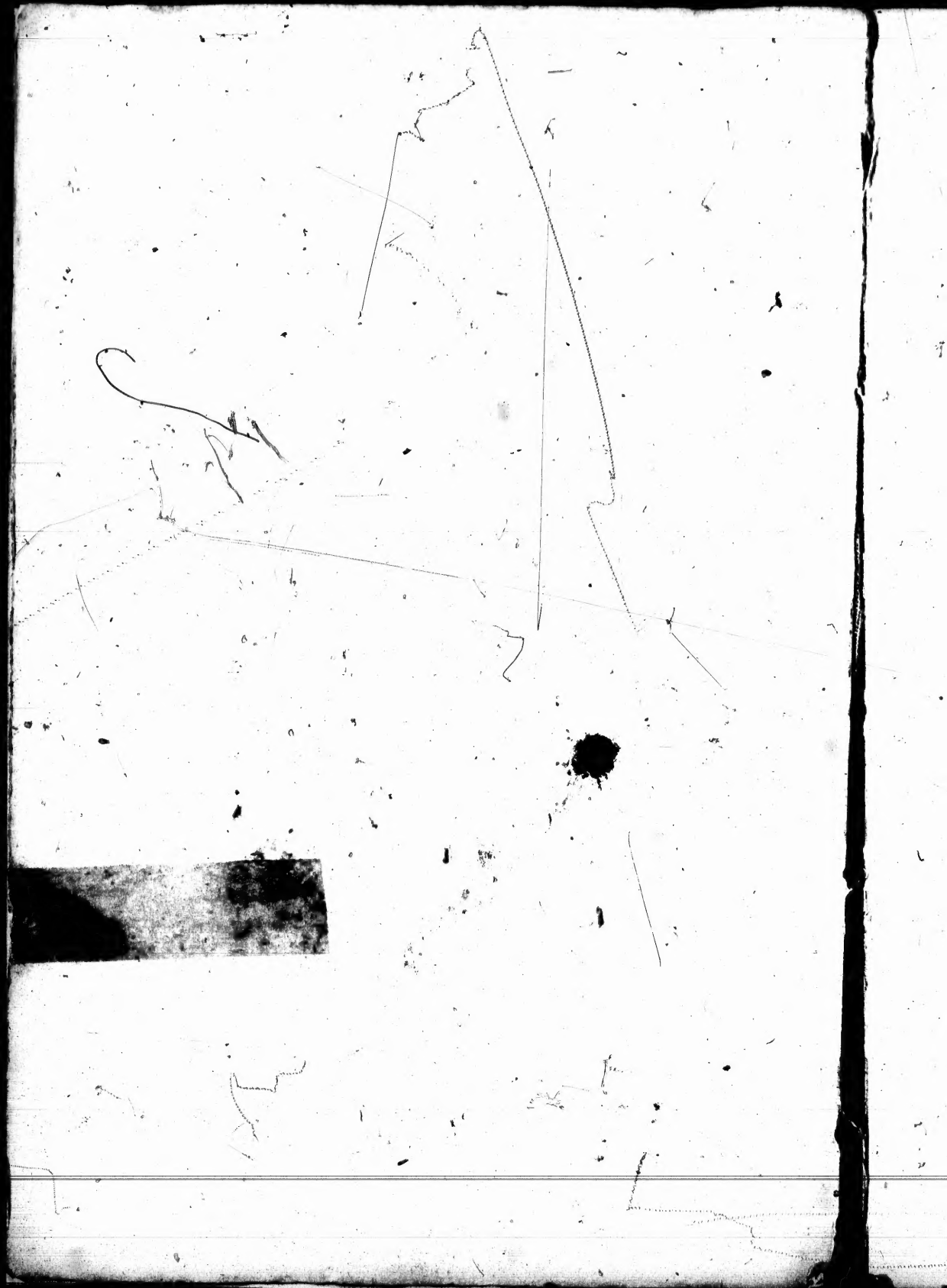




SAILING DIRECTIONS
TO ACCOMPANY
LAURIE AND WHITTLE'S
NEW GENERAL CHART
OF
The ISLAND and BANKS of
NEWFOUNDLAND,
THE
GULF AND RIVER OF ST. LAWRENCE,
Nova Scotia,
THE BAY OF FUNDY,
AND THE
COASTS THENCE TO BOSTON, CAPE COD, &c.

COMPILED, CHIEFLY, FROM
THE SURVEYS AND OBSERVATIONS OF CAPTAIN JAMES COOK, F.R.S.; OF MR. THOMAS BACK-
HOUSE, MASTER IN THE ROYAL NAVY, AND AUTHOR OF THE NEW PILOT FOR NOVA
SCOTIA; OF MR. FRANÇOIS OWEN, MASTER IN THE ROYAL NAVY, &c.; OF
MR. DES BARRES, AND OTHER EMINENT NAVIGATORS, WELL AC-
QUAINTED WITH THE NAVIGATION OF THE COASTS.

LONDON:
PRINTED FOR ROBERT LAURIE AND JAMES WHITTLE,
CHART-SELLERS TO THE ADMIRALTY, &c. &c.
NO. 53, FLEET-STREET.

1810.

Entered at Stationers' Hall.

Printed by RIDER and WARD, Little Britain, London.

CONTENTS.

SECT. I.

The ISLAND and BANKS of NEWFOUNDLAND.

	PAGE
General Remarks.—St. John's to Cape Race.....	1
Cape Race to Cape Chapeau Rouge, including the Harbour of Placentia, &c....	4
Cape Chapeau Rouge to Cape Ray, including Fortune Bay, &c.....	13
Cape Ray to Cow Head.....	26

SECT. II.

The GULF and RIVER of ST. LAWRENCE.

The Gulf of St. Lawrence, generally	30
The River of St. Lawrence	31

SECT. III.

The EASTERN COASTS of NEW BRUNSWICK, &c. to the GUT of CANSO, with ST. JOHN'S or PRINCE EDWARD'S ISLAND.

Gaspe Bay to the Gut of Canso	41
The Gut of Canso	43
St. John's or Prince Edward's Island.....	45

SECT. IV.

CAPE BRETON ISLAND, with CHEDABUCTO BAY, &c.

Port Hood, St. Ann's and Sydney Harbours	47
Louisbourg Harbour and Chedabucto Bay	48
Courses and Distances.....	49

SECT. V.

The SOUTHERN and SOUTH-WESTERN COASTS of NOVA SCOTIA, &c. including the BANKS.

Isle of Sable and Banks of Nova Scotia	49
Coasts of Nova Scotia	51

CONTENTS.

	PAGE
Halifax Harbour and adjacent Coast	52
Halifax to Cape Canso, Courses and Distances between	55
Halifax to Cape Sable, including Shelburne and other Harbours.....	56
Cape Sable to the Bay of Fundy and Chignecto Bay	62
Harbour and River of St. John, and thence to Passamaquady.....	64

SECT. VI.

The COASTS of the UNITED STATES, from PASSAMAQUADY to CAPE COD, &c.

Passamaquady, St. Andrew's, &c.....	66
The Coast westward of Passamaquady, to Cape Elizabeth	67
Cape Elizabeth to Cape Anne	71
Cape Sable, of Nova Scotia, to Cape Cod, Plymouth, Boston, &c.....	74
Directions for Sailing by Cape Cod Lighthouse.....	77
Directions for Sailing in and out of Boston Bay, from Cape Cod and Cape Anne. By Mr. Knox, Branch-Pilot.....	78
To work into Boston Bay, &c.....	78
Remarks by Mr. Osgood Carlton.....	79
Sailing Directions for the Harbour of Boston, &c.	79
To sail in during Night, or turn within the Lighthouse Anchorage	79

PAGE
... 52
... 55
... 56
... 62
... 64

SAILING DIRECTIONS.

THE BEARINGS AND COURSES ARE THOSE BY COMPASS, UNLESS WHERE OTHERWISE EXPRESSED. THE VARIATION OF THE NEEDLE IN THE ENVIRONS OF ST. JOHN'S IS RATHER MORE THAN TWO POINTS, OR 25 DEGREES, WEST. IT DECREASES TO THE WESTWARD, BEING AT THE ENTRANCE OF THE RIVER ST. LAWRENCE, 18 OR 19 DEGREES; AT QUEBEC, ONLY 12 DEGREES; AT THE ISLAND OF CAPE BRETON IT IS ABOUT 20 DEGREES, DECREASING THENCE, TO THE WESTWARD, TO 18 AND 16 DEGREES.

SECT. I.

The ISLAND and BANKS of NEWFOUNDLAND.

GENERAL REMARKS.—ST. JOHN'S TO CAPE RACE.

NEWFOUNDLAND is, in general, a hilly and rugged country, variegated with extensive woods of birch, small pine, and fir. It is covered with snow about five months in the year, and involved, for a still longer period, in thick fogs, accompanied with sleet.

Its chief towns are, St. John's in the S.E. situate on an excellent harbour, which will presently be described, and Placentia in the South, on the bay of that name.

The BANKS, which are, in their fisheries, the source of all the opulence in the island, are vast submarine elevations, of various depths and very unequal figure, as shewn by the chart. The depths on the Great Bank vary from 15 to 80 fathoms. The bottom, which is generally of sand and gravel, is covered in many places with shells, and abounds with different sorts of fish; but, more particularly, with cod, which is inconceivably numerous: for, although from 200 to 400 vessels have been annually freighted with this article of commerce for nearly two centuries, there appears to be no sensible decrease of the former plenty. A great swell and thick fog usually indicate the place of the bank.

The cod are usually most abundant where the bottom is sandy; and the least so where it is muddy. The best depth for them is between 30 and 40 fathoms, or less water. In the months of February and April, the fish, which in the winter retire to the deepest water, come on the banks, and fatten quickly.

The great fishery generally commences on the banks about the 10th of May, and continues until the end of September.

The admiral or commodore of the squadron sent out annually to protect the fisheries and settlements, is, *pro tempore*, governor of the island; and there are two lieutenant-governors, one at St. John's, and the other at Placentia.

There are, generally, in the spring, within 125 or 130 leagues of the land, and between the Outer and Grand Banks, numerous ice-bergs, or ice islands, that float down with the current from the north-westward, and which, during the foggy weather, are very dangerous: even in the months of June, July, and August, there are frequently a number of them; some of which may be seen aground, in 40 or 50 fathoms of water. In thick weather, the place of these may commonly be distinguished.

ST. JOHN'S TO CAPE RACE.

guished by a brightness of the sky above them: the breaking of the sea against them may, also, be heard at a considerable distance.

On approaching the banks, there will generally be found a number of sea-fowls, as *malimauks*, *roches*, and *divers*. The last-mentioned are seldom found more than 30 leagues from the banks; but *malimauks*, and several other kinds, are frequently seen during the whole passage; although not so numerous elsewhere as in the vicinity of the banks.

In approaching towards Cape Race, (the S. E. point of Newfoundland,) be careful to avoid the *Virgin Rocks*, a dangerous reef, lying 18 leagues E. by S. true, or S. E. by E. by compass, from that cape. They are said to extend in a true N. E. by E. direction, four miles: in gales of wind a heavy sea breaks over them; and a strong current, which sets about them, often increases the danger.

SHIPS bound to St. John's are, therefore, recommended to keep a degree and a half to the southward of the parallel of that port, until they approach the outer edge of the Great Bank; and, when they obtain soundings, to steer directly to the north-westward for Cape Spear.

Those bound to the Gulf of St. Lawrence should cross the Bank in the parallel of $45^{\circ} 30'$ and keep this latitude, or rather more to the north, until they obtain the meridian of the Isle of St. Pierre or St. Peter; or 56° W. whence they may steer directly for the north end of Cape Breton Island, &c.

THE HARBOUR of ST. JOHN'S, which is the principal harbour of Newfoundland, is an excellent one, although the entrance is narrow, being only 160 fathoms in breadth, with high land on each side, which is bold-to. The entrance lies N. W. by W. and within will be found to narrow; as, in the inner part, there is a rock on each side, but above water. Here the breadth of the channel is only 95 fathoms, and the depth 8. When past these rocks, you may run on boldly, without any fear of danger, only avoiding a rock on the south side, called *Prosser's Rock*, on which there are only 9 feet water, and lying at about 30 fathoms from the shore, off a reef lying within the King's wharf.

Within the harbour you may anchor in any depth, from 4 to 10 fathoms, landlocked from all winds, as the harbour within the Narrows lies W. S. W. It is, however, to be noticed that, there is no possibility of sailing in, unless with the wind from S. W. by S. to East. The wind from S. W. to N. E. by N. blows out of the Narrows. Here ships must then anchor, and warp in, for which purpose there are rings in the rocks on both sides.

THE FOLLOWING DIRECTIONS FOR ST. JOHN'S have been given by Mr. FRANCIS OWEN, author of the new Chart of this harbour.

"The entrance of St. John's Harbour is readily known by the block-house on Signal-hill, on the North Head, and Amherst Fort on the South Head. There is a sunken rock, called the *Kestrel*, 50 fathoms without South Head, with only 25 feet water on it. This rock is about 10 fathoms long and 7 broad; the marks for it are, Fort William, (which stands within the harbour on the north side,) open of South Head, bearing N. 39° W. and the outer *Wash-ball Rock* open with Cuckold's Head, bearing N. 47° E. The Wash-ball Rocks join the North Head; they are all above water and steep-to, therefore not dangerous. The course in the Narrows is N. W. by W. distance 370 fathoms, to Chain Rock on the North, and the Pancake on the South side. Both these rocks are above water, and steep-to. Sixty-five fathoms within the Pancake Rock, on the south shore, lies the *Little Pancake*, a rocky shoal, dry at low water; and 80 fathoms within the latter lies the sunken rock, called *Prosser's Rock*, running off 30 fathoms from a rock above water, in form of a saddle, with 18 feet water in the hollow, and only 5 feet on the outside. It is steep-to, with 5 fathoms close to it. After you have passed *Prosser's Rock*, you may stand to either shore, as they are clear and steep-to. You may anchor in what water you please, from 8 to 4 fathoms, muddy bottom.

"The tide at St. John's sometimes rises 7 or 8 feet; it is not regular, but greatly influenced by the wind. The variation observed in October 1798, was $23^{\circ} 34'$ W."

Be very cautious, if unacquainted with the coast, that you mistake not the place called *Quidy Vitty* for the harbour of John's, at it shews an opening like a good harbour, but is fit only for boats. *Fort Amherst*, which stands on the south head of St. John's, appears white, and the flagstaffs on the hill, over the north head, will point to the harbour of St. John's: besides these, the course from *Cape Spear* is N.N.W. and the distance about 4 miles.*

Between the harbour of St. John and Cape Spear are three bays; the first is from St. John's to Low Point, and is called *Freshwater Bay*; the second, from Low Point to Black Head, is called *Deadman's Bay*; the third, is from Black Head to Cape Spear, and is called *Cape Bay*.

From Cape Spear to the north point of *Petty Harbour Bay*, the course and distance are S.W. $2\frac{1}{2}$ miles; and thence to the south point, S.W. by S. $2\frac{1}{2}$ miles. *Petty Harbour* lies near a league in from the heads, and is a small cove, capable of containing only 2 or 3 vessels.

From the south point of *Petty Harbour Bay* to the *Bay of Bulls*, the course is S.W. $\frac{1}{2}$ S. and the distance about 3 leagues. About midway between is a place called the *Spout*, being a cavern into which the sea runs; and, having a vent on the top of the land, it spouts up the water to a great height, especially if there be any sea, so that it may be seen a great way off.

From the south head of the *Bay of Bulls* to the north head, called Bull Head, the bearing and distance are N.E. $\frac{1}{4}$ E. $1\frac{1}{2}$ mile; between these heads the bay runs in N.W. by W. for at least 2 miles, and then N.W. by N. for about a mile to the river head. In this bay is good riding, in from 20 fathoms at the first entrance between the heads, to 18, 16, &c. after you are within *Bread and Cheese Point*, which is about half up the bay, on the north side, where there is a cove. Off this point, nearly half a cable's length, lies a sunken rock, which must be avoided; every other part of the bay is bold-to, and free from danger. Being past the point, run up and anchor (or turn up) against *John Clay's Hill*, bringing it to bear N.E. by N. and anchor in 12 or 14 fathoms water: merchantmen run farther in, and anchor in from 10 to 7 fathoms, and lie not above a point open.

From the Bay of Bulls to Cape Broyle, the course and distance are S.W. $\frac{1}{4}$ S. $4\frac{1}{2}$ leagues.

WHITLESS BAY lies about $1\frac{1}{2}$ mile to the southward of the Bay of Bulls; it is in some degree sheltered by *Green Island* and *Gull Island*, which lie before it, but is not safe for ships. To the southward of Whitless Bay Point is *Momables Bay*, quite exposed to sea winds. About 2 miles southward from Momables Bay is *Toad's Cove*; near which lies Foxes' Island. About 2 miles to the southward of Foxes' Island is *Buline Head*; between them lie *Ile de Spear* and *Goose Island*.

From *Buline Head* to *Cape Neildick* the bearing and distance are S.W. by W. about half a league; and, from Cape Neildick to *Brigus Head*, S.W. by S. $2\frac{1}{2}$ miles. *Brigus Harbour* lies to the northward of Brigus Head, and is fit for small vessels only.

CAPE BROYLE, &c.—From Brigus Head to *Cape Broyle* is about 2 miles south. *Cape Broyle Harbour* lies in about N.W. by W. $\frac{1}{4}$ W. above 2 miles; but it is exposed to sea winds. Cape Broyle is the most remarkable land on all the south coast of Newfoundland; for, coming either from the southward or northward, it appears like a saddle. S.E. by E. from the northern point of Cape Broyle, about half or three-quarters of a mile, lies a sunken rock, called *Old Harry*, on which is but 13 feet water; the sea breaks upon it in bad weather; but between it and the shore there is 12 or 13 fathoms of water. In very bad weather the sea breaks home almost to the shore from *Old Harry*, by reason of the current, which generally sets strong to the southward.

From Cape Broyle Head to *Ferryland Head*, the bearing and distance are S.S.W.

* These Directions for the Southern Coasts of Newfoundland are abstracted, chiefly, from *Laurie and Whittle's* larger Book of Directions, which accompanies the "NORTH AMERICAN PILOT," Part I. and which comprises Directions for all the coasts of the Island, Labrador, &c.

4 CAPE RACE TO CAPE CHAPEAU ROUGE.

about 2½ miles, between are three islands, which lie before *Caplin Bay*, and ships may sail between them to that place: of these the northernmost is called *Stone Island*; the middlemost *Goose Island*, which is the second in size; and the southernmost *Ile au Bois*, which is the greatest. There is room for ships to tug between these islands, excepting between *Stone Island* and *Cape Broyle*, where there is a great rock.

Caplin Bay is large and good, and runs in a considerable way within the islands above mentioned, where a number of ships may ride in good ground, in from 10 to 20 fathoms water.

From the north part of *Ferryland Head* to *Ferryland*, the bearing and distance are W.N.W. more than a mile. To go into *Ferryland Harbour*, you must sail between the north part of *Ferryland Head* and *Ile au Bois*; it is not wide, but there is water enough, and clean ground: when within the *Ile au Bois*, you may run in and anchor where you please, it being of a good breadth. The *Pool* is a place on the larboard side going in, within a point of beach, where you lie in 12 feet at low water. From *Ile au Bois* almost into the land to the westward, are small islands and rocks, which make *Ferryland Harbour*, and divide it from *Caplin Bay*; there is a passage for boats between the said rocks in some places. Spring tides rise from 3 to 4 feet.

From the south part of *Ferryland Head* to *Aquafort* the course and distance are W. by N. about 3 miles. *Crow Island* lies about a mile E. by N. from the mouth of *Aquafort*; and from the S.E. end of *Crow Island* lies a shoal, about a cable's length. *Aquafort Harbour* lies in W.N.W.; there is a great rock above water on the south side of the entrance, which is bold-to: you run up about 2 miles within the harbour's mouth, and anchor on the north side, quite land-locked.

From *Aquafort Point* to *Black Head*, the bearing and distance are S.E. one mile; from *Black Head* to *Bald Head* S. by W. about a mile; and thence about a mile southward is the north point of *Fermowes*.

FERMOWES is a very good harbour, and bold going in; no danger but the shore itself: it lies in N.W. by N. and N.W. Being past the entrance, there are several coves on each side, in the harbour, where ships may ride. The first, on the north side going in, is *Clear's Cove*; the next within it at a little distance, on the same side, is the *Admiral's Cove*, where you may lie land-locked from all winds, in 7 or 8 fathoms water, good ground. On the south side is the *Vice Admiral's Cove*, farther westerly, where several ships may lie; and, farther westward, is another cove equally good. There are 20 fathoms water in the entrance of the harbour, and within from 14 to 4 fathoms.

From *Fermowes* to *Renowes* the bearing and distance are S.W. by S. about 1½ league. Between these places is a cove called *Bear's Cove*. Off the south point of *Renowes Harbour*, at a small distance from the shore, is an island; and, S.E. from the same point, about half a league, high above water, is *Renowes Rock*, which may be seen 3 leagues off. *Renowes* is but a bad harbour, being full of rocks, with shallow water. From *Renowes* to *Cape Ballard* the course and distance are S.S.W. 2 W. 2½ leagues; between are *Burnt Head*, *Freshwater Bay*, and *Small Point*. From *Cape Ballard* to *Cape Race*, the bearing and distance are S.W. by W. 3 leagues; between which, and near *Cape Ballard* is *Chain Cove*, with several rocks lying before it, but no harbour; and about half way is *Clam Cove*, which is fit for boats only.

CAPE RACE to CAPE CHAPEAU ROUGE.

From *Cape Race* the land trends away to the westward, W. by S. one mile and a half; then west one league to *Mistaken Point*; and from *Mistaken Point* to *French Mistaken Point*, about N.W. by W. 2 miles. From *French Mistaken Point* to the *Powles* it is N.W. 8 miles.

The *Powles* is the east point of the entrance into *Trepassey Harbour*; from the *Powles*

Powles to *Cape Mutton*, it is E.S.E. $\frac{1}{4}$ E. one mile. Between these points lies *Mutton Bay*, which is about 2 miles deep, with 12 to 3 fathoms water, rocky bottom. The N.W. part of the head of this bay is separated from *Trepassey Harbour* by a low, narrow, sandy, stony beach, over which the vessels in the harbour may be seen.

From *Mistaken Point* to *Cape Pine*, the course and distance are W.N.W. $\frac{1}{4}$ W. 4 $\frac{1}{2}$ leagues.

TREPASSEY HARBOUR. The entrance of *Trepassey Harbour* lies nearly 5 miles E.N.E. from *Cape Pine*; it is about three quarters of a mile wide, and runs nearly of the same breadth for 2 $\frac{1}{2}$ miles, where it narrows to one quarter of a mile, but again increases to three quarters of a mile, where the ships ride. The danger in sailing into this harbour are a small rock on the east shore, about a mile within the *Powle-head*, and about one third of a cable's length from the shore; and, on the west shore in the harbour, off a stony beach, a shoal, which runs along shore up the harbour to a low green point. *Baker's Point* on with a low rocky point in the entrance of the harbour, will carry you clear of this shoal. When you are nearly up with the low green point, you may steer more to the westward, and anchor either in the N.W. or N.E. arm, in 5 or 6 fathoms.

From *Cape Pine* to *Cape Freels*, the course and distance are West 1 $\frac{1}{2}$ mile. The land about *Cape Pine* is moderately high and barren. From *Cape Freels* the land trends about W.N.W. one mile, then N.W. $\frac{1}{4}$ W. one mile to the eastern head of *St. Shot's*.

From the eastern head of *St. Shot's* to *Point Lance*, the bearing and distance are N.W. $\frac{1}{4}$ N. 22 miles. These points form the entrance into *St. Mary's Bay*, which runs up 9 $\frac{1}{2}$ leagues to the E.N.E. with several very good harbours in it, the land on each side being moderately high.

The land from *Point Lance* lies E. $\frac{1}{4}$ S. 3 leagues, to a high bluff cape, from which the land along the west side of the bay bears N.E. by E. 10 leagues up to the head of the bay.

From the afore-mentioned bluff cape to *Cape English*, on the east shore, the course is S.S.E. $\frac{1}{4}$ E. distance 5 leagues.

From the eastern head of *St. Shot's* to the western head, the course is N. by W. $\frac{1}{4}$ W. distance 2 miles: *St. Shot's Bay* is about a mile deep, and entirely open to the sea.

From the western head of *St. Shot's* to *Gull Island*, it is N. $\frac{1}{4}$ E. distant 4 miles; this island is small, and close to the main land.

From *Gull Island* to *Cape English* the bearing and distance are N. by E. $\frac{1}{4}$ E. about 2 leagues. This cape is high table land, terminating in a low rocky point, forming a bay about a mile deep to the southward of it; at the bottom of which is a low stony beach, within which is *Holyrood Pond*, running to the E.N.E. for about 7 leagues. This pond makes *Cape English* appear like an island.

From *Cape English* to *False Cape* the course is N.E. $\frac{1}{4}$ N. one mile distant.

From *Cape English* to *Point la Haye*, the bearing and distance are E.N.E. 3 leagues. This is a low point, from which a ledge of rocks extends a quarter of a mile into the sea, and above a mile along shore, on which the sea breaks in bad weather. This is the only danger in all *St. Mary's Bay* that will take a ship up.

ST. MARY'S HARBOUR.—From *Point la Haye* to the south point of *St. Mary's Harbour*, called *Double Road Point*, the course and distance are E.N.E. 1 $\frac{1}{2}$ mile; the land between is low and barren. From *Point la Haye* to *Ellis Point*, which is the low point on the starboard side going into *St. Mary's Harbour*, it is 2 miles. The entrance of this harbour is above a mile wide, and bears from *Point Lance* E.S.E. $\frac{1}{4}$ E. 9 leagues. Within the points that form the entrance, it divides into two branches, one to the S.E. the other to the E.N.E. When you are within *Ellis Point*, haul in to the southward, and anchor abreast of the houses and stages, upon a flat, in 4 or 5 fathoms, where you will lie land-locked. This flat runs off about half a mile from

CAPE RACE TO CAPE CHAPEAU ROUGE.

from the shore; and without it is from 15 to 40 fathoms water over to the other side; but the best anchorage is about 2 miles above the town, where it is above half a mile wide, opposite *Brown's Pond*, which may be seen over the low beach on the starboard side; here you will lie land-locked in 12 fathoms water, and excellent ground all the way up to the head of the bay. The E.N.E. arm lies open to the sea, and is not resorted to by ships.

Two leagues above *St. Mary's Harbour* lie two islands, the largest of which is about one league long, and is called *Great Colinet Island*, the south end of which bears from *Cape English* N. by E. distant 3 leagues. On either side of this island is a safe passage up the bay, taking care to give *Shoal Bay Point* a berth of a quarter of a mile, to avoid some rocks which lie off that point. On the north side of *Great Colinet Island* is a stony beach, off which lies a bank for about a quarter of a mile, on which is from 7 to 17 fathoms water, rocky bottom.

Little Colinet Island lies $1\frac{1}{2}$ mile north-eastward from *Great Colinet Island*; is above 1 mile long, and half a mile broad.

Mal Bay lies to the westward of the north-east point of *St. Mary's Harbour*; it is about a mile wide, and about 2 miles deep; but there is no good anchorage, a heavy swell generally setting into it.

Shoal Bay Point lies one mile distant from the east end of *Great Colinet Island*. The entrance into *Great Salmon River* lies E.N.E. $\frac{1}{2}$ E. 2 leagues from the north part of *Little Colinet Island*; it is about three quarters of a mile wide, and runs to the E.N.E. 7 or 8 miles. There is very good anchorage in it; but the best is about 3 miles from the entrance on the north side, in a sandy cove, in 5 or 6 fathoms water.

NORTH HARBOUR lies N. by E. three quarters of a mile from the north part of *Little Colinet Island*; it is about a mile wide at the entrance, and runs to the northward about 3 miles: in it is very good anchorage, in about 6 or 7 fathoms water, about 2 miles within the entrance, where it is not above half a mile wide: or you may run farther up, taking care to keep the starboard shore close on board, and anchor within the point of the Narrows.

Colinet Bay lies N.E. $\frac{1}{2}$ E. $5\frac{1}{2}$ miles from the north point of *Little Colinet Island*; in it is very good anchorage, in from 5 to 12 fathoms water.

From *Point Lance* to *Cape St. Mary*, the bearing and distance are N.W. 8 miles: *Cape St. Mary* is a pretty high bluff cape, and the land along shore from it, for a considerable distance, appears even, and nearly of equal height with the cape itself.

From *Point Lance* W.N.W. 3 miles, lie the *Bull and Cow Rocks*; they are two flat rocks, and very near together, with several small rocks round them, all above water, and may be seen 4 leagues, when open, from the land. They bear S.E. by S. from *Cape St. Mary*, $5\frac{1}{2}$ miles, and one mile from the nearest part of the main land; at about two thirds of the distance from them to the main, is a small rock, which appears above water at half tide; there are 10 fathoms water between it and the main, and 15 fathoms between it and the *Bull and Cow*.

St. Mary's Keys or Rocks, lie W. by S. from *Point Lance*; W.S.W. $\frac{1}{2}$ W. from the *Bull and Cow*, and S. $\frac{1}{2}$ E. $7\frac{1}{2}$ miles from *Cape St. Mary*. These are two rocks that appear just above water, and the sea always breaks very high upon them. They lie S.S.E. and N.N.W. from each other about 3 cables' length; and there are 10 fathoms at a cable's length all around them, excepting to the S.S.E. where there are but 6 fathoms at 2 cables' length. Between them and *Cape St. Mary* is a depth of 25 and 30 fathoms.

From **CAPE ST. MARY** to **CAPE CHAPEAU ROUGE** the bearing and distance are W.N.W. 17 leagues. These capes form the entrance of *Placentia Bay*. *Cape Chapeau Rouge* is the highest and most remarkable land on that part of the coast, appearing above the rest like the crown of a hat, and may be seen in clear weather 12 leagues off.

From *Cape St. Mary* to *Point Breme*, the course is N. by E. easterly, distance 7 miles;

PLACENTIA BAY AND ITS HARBOURS.

7

miles; and from *Point Brema*, to the *Virgin Rocks*, N.E. $\frac{1}{2}$ E. 13 miles. These rocks lie about 2 miles from the main, and show above water.

From the *Virgin Rocks* to *Point Verde* or *Green Point*, the bearing and distance are N.E. by E. $\frac{1}{2}$ E. 5 $\frac{1}{2}$ miles. There is no shelter for ships or vessels between Cape St. Mary and Green Point; the land between is of a moderate, and appears nearly of an equal, height all the way; but over *Placentia*, and to the northward of it, the land is very high and uneven, with many peaked hills.

PLACENTIA HARBOUR. *Point Verde*, or *Green Point*, is low and level, and forms the south side of the entrance of *Placentia Road* and *Harbour*, which is situated on the east side of the great bay of *Placentia*. If you are coming from the southward, and going into the road, you should keep a league from the shore, to avoid the *Gibraltar Rock*, which lies west from *Green Point*, till you bring the *Castle Hill* open to the northward of that point. The *Castle Hill* is on the north side of the road on which stands the castle, and is distinguishable far out at sea. *Gibraltar Rock* has only 8 feet water over it, at low water spring tides, and lies 2 $\frac{1}{2}$ miles west from *Green Point*. When you have the *Castle Hill* on with *Green Point*, it will lead you a quarter of a mile to the northward of it; run in with the mark on, keeping your lead going, as there are regular soundings on both sides, and giving *Green Point* a berth of near 2 cables' length, passing it in 4 fathoms water, you may proceed to the anchorage under the *Castle Hill*, at three quarters of the distance over from that side, where you lie in 6 or 7 fathoms water, good ground. At the bottom of the road is a long beach, which terminates to the north in a point, on which stand the houses and a fort; between which and the *Castle Hill* is the entrance into *Placentia Harbour*, which is very narrow, with 3 $\frac{1}{2}$ fathoms water; but within the Narrows it widens to one third of a mile, and runs up E.N.E. above a mile and a half, with 6 or 7 fathoms water, where ships may lie in perfect security. In going in keep nearest the starboard side.

THE FOLLOWING DIRECTIONS HAVE BEEN GIVEN ON THE NEW CHART OF THE ROAD AND HARBOUR OF PLACENTIA, BY MR. FRANCIS OWEN, MASTER, R.N.

"THE Road and Harbour of Great *Placentia* are on the east side of the Bay of *Placentia*. The southern entrance of this road is *Point Verde*, which bears from Cape St. Mary N.E. distance 25 miles; from the Outer *Virgin Rock* N.E. by E. $\frac{1}{2}$ E. and from the south side of *Red Island* S.S.E. distance 14 miles.

"*Point Verde* is a low level point, with a pebble beach on the east side, nearly half a mile long, with several fishing stages just within the point. At the end of this beach is a high rocky cliff, that extends to the S.E. corner of the bay, where it again terminates in a pebble beach. This beach runs E.N.E. one mile to the old fort or south entrance of the harbour: on the inside of this beach stands the town of *Placentia*, which faces the S.E. arm of the harbour. A little to the southward of the town is a high hill, with a remarkable cliff on the middle of the beach.

"The outer point on the north side is level, with a clay cliff on the outer part. It bears from *Point Verde* N.E. by N. nearly, distant one mile and a half: from this point the land forms a small bay, with a stony beach round it, to the corner of the cliff under *Signal Hill*, which is the first hill on the north side of the road from this point. The cliff continues to *Freshwater Bay*, which is formed in a small valley between *Signal Hill* on the west, and *Castle Hill* on the east, with a pebble beach round it. A small rivulet runs down this valley, where ships can water. On the east side of this bay is *Castle Hill*, with an old fortification on its top; within this hill is a narrow beach, which forms the north entrance into the harbour. At low water the entrance of the harbour is not more than 60 fathoms across, and the tide into it runs more than 4 knots an hour.

The only dangers near *Placentia* are, the *Virgin Rocks* and *Gibraltar Rocks*, on the

PLACENTIA BAY AND ITS HARBOURS.

the south, and the Moll Rock on the north. The Outer Virgin Rock bears from Point Verde S.W. by W. $\frac{1}{4}$ W. distant $5\frac{1}{2}$ miles, and from Point Breme N.E. $\frac{1}{4}$ E. distant 12 miles. These rocks are all above water, with 10 and 12 fathoms round them. The Gibraltar Rock bears from Point Verde west, rather southerly, distant $2\frac{1}{2}$ miles, and is near 2 miles from the shore.

"The Moll Rock bears from Point Verde N. by E. $\frac{1}{4}$ E. distant 2 miles, and from Moll Point nearly S.W. three quarters of a mile. There are only 12 feet of water on this rock, with 10 fathoms round it.

"The land from Cape St. Mary to Placentia is of moderate height, and nearly even; but, to the northward of it, the land is high and uneven, with several peaked hills.

"When bound to Placentia, after you have passed Cape St. Mary, the course from Point Breme to the Outer Virgin Rock is N.E. $\frac{1}{4}$ E. distant 12 miles; and thence to Point Verde N.E. by E. $\frac{1}{4}$ E. $\frac{5}{8}$ or 6 miles. Before you get the length of the Virgins, if the weather be clear, you will see Point Verde, a long low point under the high land of Signal Hill and Castle Hill. The latter is remarkable by its having an old fortification on its summit, which may be seen a great way off at sea.

"When you have gotten the length of the Virgin Rocks, you must steer to the northward, till you bring the old fort on Castle Hill on, or open to the northward of, Point Verde. It bears from Point Verde E. $\frac{1}{4}$ N. This mark will bring you to the northward of the Gibraltar Rock; you may then steer for the road, taking care not to come nearer Point Verde than two cables' length; as a flat runs off to the northward, with only 12 and 15 feet water on it. The soundings of the road are regular; from 6 to 3 fathoms, sandy bottom; but the deepest water is on the north side, as there are 5 and 6 fathoms close to the rocks. On the south side the water is shoal, as there are not more than 12 feet at 100 fathoms from the shore. The best anchorage for ships of a large draft of water is abreast of Freshwater Bay, at about one quarter of the distance from the north shore; where you will have 5 or $5\frac{1}{2}$ fathoms, with sandy bottom. Point Verde will then bear W. $\frac{1}{4}$ N. and the outer point of Signal Hill N.W. $\frac{1}{4}$ N. The whole bay has a sandy bottom, and good holding ground.

"The tide rises 7 or 8 feet; it is felt but little in the Road, but runs 4 or 5 knots in and out of the harbour. Here it flows on the full and change days of the moon at 9h. 15m. in the morning. The variation of the compass in the road, by observation on the 22d of August 1800, was $22^{\circ} 40'$ W. the longitude where we lay, by our chronometers, was $53^{\circ} 31' 45''$ West."

MAGNETIC BEARINGS AND DISTANCES OF PLACES ON THE EAST SIDE OF PLACENTIA BAY.

	DEG.	MILES.
From Cape St. Mary to Point Breme.....	N. 14 E. or N. by E. nearly 7	
to the south side of Red Island N. 22 E. or N.N.E.		34
From Point Breme to the Virgin Rocks	N. 48 E. or N.E. $\frac{1}{4}$ E.	12
to the south side of Red Island N. 14 E. or N. by E. $\frac{1}{4}$ E.		28
From Virgin Rock to Point Verde	N. 61 E. or N.E. by E. $\frac{1}{4}$ E. $\frac{5}{8}$	
to Point Latina	N. 46 E. or N.E.	12
to the south side of Red Island N. 1 E. or North		16
From Point Verde to Point Latina	N. 29 E. or N.N.E. $\frac{1}{4}$ E.	6
to the south side of Red Island N. 21 W. or N.N.W.		14
From Point Latina to the south side of Red Island N. 43 W. or N.W. $\frac{1}{4}$ N.		11

BAY OF PLACENTIA. Point Latina lies about 5 miles to the northward of Placentia Road; between which are several sunken rocks lying along the shore, about

Rock bears from
Breme N.E. $\frac{1}{4}$ E.
12 fathoms round
southerly, distant

2 miles, and
only 12 feet of

eight, and nearly
even, with several

Fary, the course
12 miles; and
get the length
a long low point
remarkable by its
a great way off

must steer to the
to the northward
will bring you
the road, taking
flat runs off to
ings of the road,
water is on the
e south side the
from the shore
freshwater Bay,
will have 5 or
and the outer
om, and good

4 or 5 knots
of the moon
d, by observa-
we lay, by

AST SIDE OF

MILES.
y E. nearly 7
E. 34
 $\frac{1}{4}$ E. 12
E. $\frac{1}{4}$ E. 28
by E. $\frac{1}{4}$ E. $5\frac{1}{2}$
..... 12
..... 16
E. $\frac{1}{4}$ E. 6
W. 14
 $\frac{1}{4}$ N. 11

northward of
ng the shore,
about

about half a mile off. A large mile to the eastward of Point Latina lies *Point Roche*, which a shoal stretches nearly one third of a mile.

From Point Roche $1\frac{1}{2}$ mile S. by E. $\frac{1}{4}$ E. is the entrance of *Little Placentia Harbour*, which extends W. by S. above $1\frac{1}{2}$ mile, and is near half a mile broad. Here is good anchorage in a cove on the north shore, which may be known by the west point being woody: off the east point of the cove lies a shoal nearly one third of the distance across; in the cove are 7 or 8 fathoms water.

From Point Latina to *Ship Harbour* the course is East $5\frac{1}{2}$ miles: this harbour extends N.N.E. $2\frac{1}{2}$ miles, and is a quarter of a mile wide. The anchorage is in a cove on the west side, in 10 fathoms, about a mile from the entrance.

FOX ISLAND is small and round, and lies N.E. $\frac{1}{4}$ N. 3 miles from Point Latina, and N.W. by W. a league from *Ship Harbour Point*, which is a low stony point, lying about $1\frac{1}{2}$ mile to the westward of Ship Harbour. Between Fox Island and this point are a range of rocks, which sometimes break quite across.

N.N.W. $1\frac{1}{2}$ mile from Fox Island is a steep rock above water, called *Fishing Rock*; and N.N.E. $1\frac{1}{2}$ mile from Fishing Rock lies a sunken rock, which almost always breaks.

THE RAM ISLANDS are a cluster of high islands lying N.E. $\frac{1}{4}$ E. of Fox Island, about 8 miles. East 3 miles from the south point of Ram Islands is the entrance into *Long Harbour*; there is no danger in going in; the best anchorage is on the north side, to the eastward of *Harbour Island*, between it and the main, where you will lie secure from all winds, in 7 or 8 fathoms water.

From RAM ISLANDS TO LITTLE HARBOUR is N.N.E. about 5 leagues; there are several low islands and rocks along shore between these places; but not the least shelter, even for boats, along the coast. Little Harbour has bad ground, and lies quite exposed to S.W. winds.

LONG ISLAND.—From Point Latina to the south point of Long Island the course is N. $\frac{1}{4}$ E. $4\frac{1}{2}$ leagues; this island is nearly 3 leagues long, high land, the south point being of remarkably steep rocks. On the east side of it, about a league from the south point, lies *Harbour Buffet*, which is tolerably good; the entrance to it is narrow, but has 13 fathoms water in it. This harbour has two arms, one extending westward, the other northward; the best anchorage is in the north arm, in 15 fathoms water. This harbour may be known by the islands which lie in its mouth, and to the southward of it, and by *Harbour Buffet Island*, which lies E. $\frac{1}{4}$ S. one mile from the entrance. To sail into it you must pass to the northward of all these islands.

About 4 miles from the south point of Long Island, on the west side, lies *Muscle Harbour*, the entrance to which is between Long Island and Barren Island, and opposite the north end of the latter: the depth is from 10 to 22 fathoms, rocky bottom.

SOUTH HARBOURS.—*Little South Harbour* lies one mile to the westward of Little Harbour; and it has several rocky islands before its mouth, which, in going in, must be left on your starboard side, excepting one, on either side of which is a safe passage of 15 fathoms water. On the east shore, within the islands, is a sunken rock, about a cable's length from the shore, which generally breaks. Nearly opposite on the west shore are some rocks, about half a cable's length from the shore, that show at one third ebb. This harbour is about $1\frac{1}{2}$ mile long, near half a mile wide, with 7 fathoms, good bottom.

Great South Harbour is about a mile to the northward of Little South Harbour; there is no danger in sailing into it, and near the head is very good anchorage in 6 or 7 fathoms water.

One mile to the westward of Great South Harbour is *Isle au Bordeaux*; a high round island near the main.

The entrance into *Come by Chance Harbour* lies N.N.E. 4 miles from the *Isle au Bordeaux*, and runs up N.E. by E. 3 miles, and has from 20 to 3 fathoms water, sandy bottom, but is quite exposed.

North Harbour is N.N.W. 2 miles from Come by Chance; and S.E. by S. $2\frac{1}{2}$ miles from

PLACENTIA BAY AND ITS HARBOURS.

from *Piper's Hole*; about 2 miles from the entrance is good anchorage in 7 fathoms water, and no danger in sailing in.

Red Island is high barren land, about 5 miles long, and 3 miles broad. The south point bears N.N.W. 11 miles from Placentia Road; and E. by N. distance 16 leagues from Mortier Head, which is on the west side of the bay.

From *Piper's Hole* to *Barren Island* the distance is nearly 3 leagues; between is a series of islands, about half a mile from the west shore, having from 4 to 17 fathoms water within, good anchorage all the way.

Barren Island is about $3\frac{1}{2}$ miles long, and one mile broad; it lies about half a mile from the main, and more than a league from the north end of *Merasheen Island*.

SANDY HARBOURS.—Nearly 4 miles W. $\frac{1}{4}$ S. from the south end of *Barren Island* is *Great Sandy Harbour*, the entrance to which is narrow, but within there are 6 or 7 fathoms water.

Little Sandy Harbour lies a quarter of a mile to the southward of *Great Sandy Harbour*, and is tolerably good; having 6 or 7 fathoms water, good bottom. In going in, you must pass to the northward of a low rock above water, which lies in the mouth of it. This harbour may be known by *Bell Island*, which lies S.E. $\frac{1}{4}$ E. $1\frac{1}{2}$ mile from the mouth of it; and N. E. by N. 13 miles from the west point of *Merasheen Island*; off the south point of the island is a remarkable rock, resembling a bell with the bottom upwards.

Nearly 3 leagues S.W. from *Bell Island*, is the north end of *Great Valen Island*, which is about 2 miles in length. On the main, to the westward of it, is *Clative Harbour*, the entrance into which is half a mile wide; in it are 40 or 50 fathoms water. The best anchorage is in the west cove, which is one mile long, but not a quarter of a mile wide, in from 17 to 20 fathoms water, good bottom.

Grammer's Rocks are just above water, and lie $1\frac{1}{2}$ mile northward from the north end of *Great Valen Island*.

The *Little Valen Island* lies near the south end of *Great Valen Island*, and about a quarter of a mile from the main; it is high and round.

W.S.W. $\frac{1}{2}$ W. $3\frac{1}{2}$ miles from *Little Valen Island* lies *Presque*, in which there is very deep water, but no safe passage, there being a number of rocks lying before the entrance.

E.S.E. 4 miles from *Presque*, and S. $\frac{1}{4}$ W. from *Little Valen Island*, lies the west point of *Merasheen Island*: this island is high, and trends to the N.E. by E. more than 6 leagues; it is very narrow, the broadest part not being more than 2 miles. At the south part of the island, near its west end, is a very good harbour, but small, with from 6 to 10 fathoms water. To go into it, keep the starboard shore on board, in order to avoid a sunken rock, that lies a cable's length off a rugged rocky point on the larboard side when going in.

Indian Harbour lies on the east side of *Merasheen Island*, at about 3 leagues from the south point; in it the ground is not good.

S.W. $\frac{1}{2}$ W. two miles from *Presque* is a sunken rock: a quarter of a mile without this rock is a rock above water, called the *Black Rock*, which lies East 2 miles from *Matricot Island*.

The harbour of *Little Paradise* lies one mile to the northward of the east point of *Matricot Island*; the only safe anchorage is in a cove, at the head, on the larboard side. One mile to the eastward of *Little Paradise* lies *La Perche*, in which there is no safe anchorage. The harbour of *Great Paradise* lies to the westward of *Little Paradise*, and is fit for boats only.

From *Matricot Island* to *Corbin Head* the course is E.N.E. $\frac{1}{4}$ E. $11\frac{1}{2}$ leagues: this course will lead just without the *Saddle-back*. Between *Matricot* and the main is *Fox Island*; between these islands is a safe passage, with not less than 9 fathoms water; but none between *Fox Island* and the main.

PARADISE SOUND.—To the westward of *Fox Island* is the entrance of *Paradise Sound*, which extends N. E. by E. $4\frac{1}{2}$ leagues, and is about a mile broad, with very deep water, and no safe anchorage till you get near the head of it.

One mile to the westward of Paradise Sound lies *Petit Fort Harbour*; a very good harbour, having in it from 14 to 7 fathoms water, good bottom. The entrance is more than a quarter of a mile wide, and lies N.E. 5 miles from the south point of Long Island, and N. by E. $2\frac{1}{2}$ miles from the north point of the same. There is no danger in going in; and the best anchorage is on the starboard or eastern side. S.E. winds heave in a great swell on the western shore when it blows hard.

Cape Roger Harbour lies close to the westward of Cape Roger, which is a high round barren head, lying N. $\frac{1}{2}$ E. $3\frac{1}{2}$ miles from the south point of Long Island. There are several low rocks and islands lying off the eastern point of the entrance. In the harbour, at a quarter of a mile within, on the western side, lies a small island; to the northward of which, between it and the main, is very good anchorage in 7 or 8 fathoms water, or farther up in 6 or 7 fathoms.

N.N.W. 2 miles from the south point of Long Island lies a small *Green Island*, which has a shoal all round to nearly a cable's length. From Green Island N.N.W. $2\frac{1}{2}$ miles, lies *Great Gallows Harbour Island*, which is a high land. Vessels may pass on either side of this island into Great Gallows Harbour, which lies one mile to the E. N. E. of the island. In this harbour is exceedingly good anchorage, in 7 fathoms water, on the starboard side, just within a low stony point, taking care to give the point a small berth, in order to avoid a rock which is alternately covered and uncovered with the tide.

AUDIERNE ISLAND lies half a mile to the northward of *Cape Judas or Middle Island*, on the west side of which there is a tolerably good harbour. At about a cable's length from Audierne Island, to the southward of the harbour, is a sunken rock; the mark for avoiding which, in coming in from the southward, is, not to haul in for the harbour till you open a remarkable green point on the southern side of the harbour. The best anchorage is on the north shore, just within a small island. A spit of rocks stretches just off the Green Point on the south shore, which are covered at high water.

Vessels bound for Audierne Harbour may pass between Cape Judas or Middle Island and Audierne Island; and between *Crow* and *Patrick's Island*, which are two small islands lying off the S.W. point of Audierne Island. Off the eastern point of Audierne is *Ford's Island*, on the west of which is a sunken rock, about a cable's length from the island, and another on the eastern side, which almost always break.

The *Saddle Back* is an islet lying E.N.E. 8 leagues from Corbin Head; E. by N. from Mortier West Point, and E.S.E. $\frac{1}{2}$ E. 3 leagues from *John the Bay Point*. Between it and the main are a great number of rocks and little islands, which render this part of the coast very dangerous. A chain of rocks extend N.E. by E. $1\frac{1}{2}$ mile from the Saddle Back.

CAPE JUDAS OF MIDDLE ISLAND is about $2\frac{1}{2}$ miles in length, and 2 in breadth, and lies $1\frac{1}{2}$ mile north of the Saddle Back; on the south end of it is a round hill, which is called the Cape. Between this island and the main are a cluster of islands and low rocks, with a great number of sunken rocks about them, called the *Flat Islands*, the innermost of which lies about one mile from the main.

Two miles to the N.N.W. of John the Bay Point lies *John the Bay*, in which there is tolerably good anchorage, with about 8 fathoms water, sandy bottom.

From John the Bay Point to *Mortier East Head*, the bearing and distance are S.W. $\frac{1}{2}$ W. 8 miles. Two miles S.W. by W. from John the Bay Point lies *Rock Harbour*, not fit for shipping. Between lie two sunken rocks, nearly half a mile from the shore.

MORTIER BAY.—Two miles W. S.W. from Rock Harbour is the entrance into Mortier Bay; at the entrance of which, on the west side, is a small harbour, called *Bobois*, of only 9 feet water. The course into Mortier Bay is N.N.E. for about 2 miles, and in it there are from 50 to 70 fathoms water, the land on each side being high; it then extends westward about 2 miles, and is nearly 2 miles wide. On the eastern side, at about 3 miles from the entrance, is an exceedingly good harbour, called *Spanish Room*, in which vessels may anchor in from 4 to 6 fathoms water, good ground, and secure in all winds. There is not the least danger in going into this harbour,

PLACENTIA BAY AND ITS HARBOURS.

harbour, giving the low rocks above water, at the entrance, on the larboard hand, a berth of one cable's length.

About a mile westward of Mortier East Head is Little Mortier Bay, at the entrance of which is a round island, called *Mortier Island*, lying one third of the distance from the west side; it is bold to all round, and may be passed on either side. Close to the first point beyond the island, on the larboard side, going in, is another little island, close under the land; and 2 cables' length from it, in a direct line towards the outer island, is a sunken rock, on which the sea breaks in bad weather, which is the only danger in the bay. At the bottom of it, $1\frac{1}{2}$ mile from Mortier Island, on the east side, is a cove, called *Fox Cove*, where there is good anchorage, and room for one ship to moor in 9 fathoms, good holding ground, two points open to the sea, from S. S. E. to S. E. On the west side of the bay is the harbour, which is small and narrow; but a very good one for small ships, where they lie moored to the shore. Off the starboard point going in, is a rock, which is always covered at high water.

About 3 miles S.W. from the entrance of Little Mortier Bay is *Iron Island*; and S.E. by E. 2 leagues from Iron Island, and S.W. $\frac{1}{2}$ W. 5 leagues from Cape Judas, lies the *Mortier Bank*, the shoal part of which is about one league over, and on which there are only 4 fathoms. The sea breaks heavily on it in blowing weather.

Iron Island is a small high land; and S.W. $\frac{1}{2}$ W. one league from it is the S.E. point of *Great Burin Island*; and W. N.W. $1\frac{1}{2}$ mile from it is the north part of *Pardy's Island*. On the main, within these islands, lie the harbours of *Great* and *Little Burin*. Vessels bound for Burin may pass on either side of Iron Island; the only danger in passing to the northward is the ledge called the *Brandys*, which almost always break; they lie near a quarter of a mile to the southward of a low rock, above water, close under the land of Mortier West Head. By keeping Mortier West Head open to the westward of Iron Island, you will avoid Gregory's Rock, on which is only 2 fathoms water, and which almost always breaks. Vessels may pass with safety between this rock and Iron Island, by giving the latter a berth of above a cable's length.

On the main, within Pardy's Island, are two remarkable white marks in the rocks; the northernmost of these brought on with the north part of Pardy's Island and Iron Island N.E. $\frac{1}{2}$ N. will lead on the *Galloping Andrews*, a shoal with 5 fathoms water on it.

The *White Horse* is a shoal with 8 fathoms on it, which bears S. S.W. one mile from Iron Island.

The *Dodding Rock* lies about a quarter of a mile from the easternmost part of *Great Burin Island*.

Great Burin Island is about $2\frac{1}{2}$ miles in length N.N.E. and S.S.W.; and near its south end is *Cat Island*, high and round, lying E.N.E. nearly 4 miles from Corbin Head.

From Corbin Head to *Shalloway Point* the bearing and distance are N.E. $\frac{1}{2}$ N. $4\frac{1}{2}$ miles. Between them, and nearly in the same direction, lie Corbin and Little Burin Islands, both high and round, and not more than a cable's length from the shore.

Shalloway Island lies N. N.W. $\frac{1}{2}$ W. one mile from Cat Island, and N.E. by E. a quarter of a mile from Little Burin Island: the passage into *Burin Harbour*, from the southward, is to the westward of *Shalloway Island*.

In sailing in, take care to give *Poor Island* a berth on your larboard hand; and, when within *Shalloway Island*, you may anchor in safety between it and *Great Burin Island*, in from 12 to 18 fathoms. The best anchorage in *Great Burin Harbour* is in *Ship Cove*. The course up to it, after you are within *Neck Point*, which is to the westward of the *Shalloway Island*, is N.N.E. about $1\frac{1}{2}$ mile. It is about a quarter of a mile wide: in sailing up, keep the west shore on board, in order to avoid a sunken rock on the east shore, at about half way up, and about a cable's length from the shore. Another rock, with 2 $\frac{1}{2}$ fathoms on it, lies above a cable's length to

to the S.W. of *Harbour Point*, which is round and green, and of a moderate height, joined to Great Burin Island by a low, narrow sandy neck.

Burin Bay is about one mile N.N.E. of Little Burin Island; it is clear, and about a mile wide every way: here ships may occasionally anchor, and lie almost land-locked. In this bay are two islands, one called Poor Island, low and barren; the other lies to the northward, before the entrance of Burin Inlet, and is high and woody.

BURIN INLET may be entered on either side of the island; it extends up 5 miles: a little within the entrance on the east side, half a cable's length from the shore, is a rock covered at three quarters flood; and $1\frac{1}{4}$ mile from the entrance, near the middle, is another rock, to the westward of which is good room, and good anchorage, in from 7 to 12 fathoms. There are 15 fathoms in the entrance; and, in the middle, two miles up, 15 to 23 fathoms; and thence up to the head are from 10 to 5 fathoms.

The east passage in is between Pardy's Island and Iron Island; but is not safe without a commanding gale, and that between the N.N.E. and S.E.

Corbin Harbour is about a mile to the northward of Corbin Head, and is a good harbour for small vessels. A quarter of a mile eastward from this harbour, and two cables' length from the shore, is a sunken rock, of 5 or 6 feet water, on which the sea breaks in bad weather. Vessels bound for this harbour must also avoid a shoal of 2 fathoms water, which lies E. S. E. from the south point of the entrance about half a mile. The best anchorage is in the north arm, about half a mile within the entrance, opposite a cove on the starboard side.

From Corbin Head to *Small Point*, the course and distance are W. S. W. $2\frac{1}{2}$ miles; and from Small Point to *Sauker Head* W. $\frac{1}{4}$ S. 2 miles: there are many head-lands between, which form coves, but afford no shelter. The coast is clear of rocks; and there are 30 fathoms water close to the shore.

From Sauker Head to *Cape Chapeau Rouge*, the bearing and distance are W. 8 miles; between lie the harbours of *Great* and *Little St. Laurence*.

The harbour of Little St. Laurence is the first to the westward of Sauker Head. To sail in, you must keep the west shore on board, to avoid a sunken rock, which lies a little without the point of the peninsula, which stretches off from the east side of the harbour. The anchorage is above the peninsula, (which shelters it from the sea-winds,) in 3 or 4 fathoms water, a fine sandy bottom. Ships may anchor without the peninsula in 12 fathoms, good ground, but this place is open to S. S. E. winds.

The harbour of Great St. Laurence, which is the westernmost, is close to the eastward of Cape Chapeau Rouge. To sail in, you should be careful with westerly, particularly with S.W., winds, not to approach too near the *Hut Mountain*, in order to avoid the flaws and eddy winds under the high land. There is no danger but what is very near the shore. The course in is first N. N.W. till you open the upper part of the harbour, then N. $\frac{1}{4}$ W. The best anchorage for large ships is before a cove, on the east side of the harbour, in 13 fathoms water.

A little above *Blue Beach Point*, which is the first on the west side, you may lie only two points open: you may anchor any where between this point and the point of *Low Beach*, on the same side, near the head of the harbour, observing that, close to the west shore, the ground is not so good as on the other side.

Garden Bank, whereon are from 7 to 16 fathoms water, lies about half a mile off Little St. Laurence, with Blue Beach Point on with the east point of Great St. Laurence.

CAPE CHAPEAU ROUGE, or RED HAT, to CAPE RAY.

Ferryland Head lies W. S. W. one mile from Cape Chapeau Rouge; it is a high rocky island, just separated from the main.

W. N. W. 5 miles from Ferryland Head, lies the *Bay of Lun*, in the bottom of which are two small inlets, called *Great* and *Little Lun*. Little Lun is the easternmost, lies open to the S. W. winds, and therefore is no place to anchor in. Great Lun lies

lies in about N. E. by N. 2 miles; is near half a mile wide, and has from 14 to 3 fathoms water. In sailing in, be careful to avoid a sunken rock, which lies about a quarter of a mile off the east point. The best anchorage is on the east side, about half a mile from the head, in 6 and 5 fathoms, tolerably good bottom, and open only to South and S. by W. winds, which cause a great swell.

Laun Islands lie off the west point of *Laun Bay*, not far from the shore; the westernmost and outermost of which lies W.N.W. westerly 10 miles from *Ferryland Head*. Nearly a quarter of a mile to the southward of this island is a rock, whereon the sea breaks in very bad weather; there are other sunken rocks about these islands, but not dangerous, being very near the shore.

Taylor's Bay lies open to the sea, about 3 miles to the westward of *Laun Islands*. Off the east point are some rocks, near a quarter of a mile.

Point Aux Gaul is a low point of land, which stretches out a little to the westward of *Taylor's Bay*: a rock lies off it above water, half a mile from the shore, called *Gaul Shag Rock*, which bears from *Ferryland Head* W.N.W. $\frac{1}{2}$ W. 5-leagues: there are 14 fathoms close to the off-side of it.

From *Point aux Gaul Shag Rock*, to the *Lamelin Islands*, the bearing and distance are, N.W. by W. one league; between is the Bay of *Lamelin*, which is unfit for shipping.

Near the south point of the westernmost *Lamelin Island*, is a rock pretty high above water called *Lamelin Shag Rock*.

From *Lamelin Shag Rock* to *Point May*, the distance is 8 miles; between lie the *Lamelin Ledges*, which are very dangerous, some of them being 3 miles from the land. To avoid them, in the day-time, you should not bring the *Lamelin Islands* to the southward of E.S.E. until *Point May* bears N.E. by N. from you; you may then steer northward between *Point May* and *Green Island*, with safety. By night, approach no nearer than in 30 fathoms water.

ST. PETER'S. The Island of *St. Peter* lies 11 leagues W. by N. from *Cape Chapeau Rouge*; it is about 4 leagues in circuit, and pretty high, with a craggy, broken, uneven surface. On coming from the westward, *Gallantry Head*, which is the S.E. point of the island, makes in a round hummock, like a small island, separated from *St. Peter's*.

A little to the N.E. of *Gallantry Head*, lie three small islands, the innermost of which is the largest, and called *Dog Island*; within it are the road and harbour of *St. Peter*. The harbour is small, and has from 20 to 12 feet water; but there is a bar across the entrance, with only 6 feet at low water, and 12 or 14 at high water. The road lies on the N.W. side of *Dog Island*, and will admit ships of any burthen in 8, 10, or 12, fathoms water. The best anchorage is on the north side; but in general it is rocky, and exposed to the N.E. winds. Be cautious, in going in or out, of some sunken rocks, which lie about a mile E.S.E. from *Bour Island*; which is the easternmost of the three islands above mentioned: this is the only danger about *St. Peter's*, but what lies very near the shore.

The *Island of Columbo* lies very near the N.E. point of *St. Peter's*, it is pretty high; between there is a passage of one third of a mile wide, with 12 fathoms water. On the north side of the island is a rock called *Little Columbo*; and about one quarter of a mile E.N.E. from it, is a sunken rock, with 2 fathoms on it.

LANGLEY or LITTLE MIQUELON. *Langley Island* lies to the N.W. of *St. Peter's*, with a passage about $2\frac{1}{2}$ miles wide between, free from danger. It is about 8 leagues in circuit, of a moderate and pretty equal height, excepting the north end, which is a low point, with sand hills; off which, on both sides, it is flat a little way; but every other part of the island is bold-to. There is anchorage on the N.E. side of the island, in 5 or 6 fathoms, a little to the southward of the *Sand-Hills*, on a fine sandy bottom.

MIQUELON. From the north point of *Langley* to the south point of *Miquelon*, the distance is about one mile; and the depth of water between is 2 fathoms. Miquelon

quelon is 4 leagues in length from north to south, and is about 5 miles in breadth at the widest part: the middle of the island is high land, called the *High Lands of Dunn*; but down by the shore it is low, excepting *Cape Miquelon*, which is a lofty promontory at the northern extremity of the island.

Miquelon Road, which is large and spacious, lies at the north end, and on the east side, of the island, between *Cape Miquelon* and *Chapeau*, which is a very remarkable round mountain near the shore, off which are some runken rocks, at the distance of about a quarter of a mile; but every where else it is clear of danger. The best anchorage is in 6 or 7 fathoms near the bottom of the road, on fine sandy bottom; but you lie exposed to easterly winds.

Miquelon Rocks stretch off from the eastern point of the island, under the high land, $1\frac{1}{2}$ mile to the eastward: some are above, and some under water; the outermost are above water, and there are 12 fathoms water close to them, and 18 or 20 a mile off. N.E. by E. $\frac{1}{2}$ E. about 4 miles from these rocks lies *Miquelon Bank*, on which are 6 fathoms water.

The *Seal Rocks*, two in number, are above water, and lie about $1\frac{1}{2}$ league off from the middle of the west side of *Miquelon*; the passage between them and the island is very safe; and there are 14 or 15 fathoms water, within a cable's length all round them.

GREEN ISLAND is about three quarters of a mile in circuit, and low: it lies E.N.E. about 5 miles from *St. Peter's*, and nearly in the middle of the channel between it and *Newfoundland*; on its south side are several rocks above and under water, extending $1\frac{1}{2}$ mile to the W.S.W.

FORTUNE BAY, &c.—From *Point May* to *Pass Island*, the bearing and distance are N. by E. 12 leagues; between is the entrance to *Fortune Bay*, which is about 22 or 23 leagues deep; and in which are several bays, harbours, and islands.

The island of *Brunet* lies pretty nearly in the middle of the entrance into *Fortune Bay*; it is about 5 miles in length: on its N.E. side is a bay, wherein there is tolerably good anchorage for ships, in 14 or 16 fathoms water, sheltered from southerly and westerly winds. In the bottom of this bay, at about a quarter of a mile from the shore, are some rocks, which must be avoided. Opposite to this bay, on the south side of the island, is a small cove, with 6 fathoms water. The islands lying off the west end of *Brunet*, to the southward, are called the *Little Brunets*, which, with *Brunet*, may be approached within a quarter of a mile all round.

The *Plate Islands* are three rocky islets, of a moderate height, the nearest of which lies W.S.W. one league from the west end of *Great Brunet*. The southernmost is about 2 miles farther off, and bears from *Cape Miquelon* E. $\frac{1}{2}$ S. $3\frac{1}{2}$ leagues, and in a direct line between *Point May* and *Pass Island*, 17 miles from the former, and 19 miles from the latter. E.S.E. a quarter of a mile from the *Great Plate* (which is the northernmost) is a sunken rock, whereon the sea breaks, which is the only danger about them.

There are several strong and irregular settings of the tides or currents about the *Plate* and *Brunet Islands*, which seem to have no dependency on the moon and the course of the tides on the coast.

Sagona Island, which lies N.E. two leagues from the east end of *Brunet*, is about a mile across each way, of a moderate height, and bold to all round.

Point May is the southern extremity of *Fortune Bay*, and the S.W. extremity of this part of *Newfoundland*; it may be known by a great black rock, nearly joining to the pitch of the point, and something higher than the land, which makes it look like a black hummock on the point. At about a quarter of a mile directly off from this black rock are three sunken rocks, on which the sea always breaks.

N. by E. $1\frac{1}{2}$ of a mile from *Point May* is *Little Dantzick Cove*; and 2 miles farther is *Great Dantzick Cove*. From *Dantzick Point* (which is the north point of the cove) to *Fortune Head*, the bearing and distance are $2\frac{1}{2}$ leagues E.N.E. and thence to *Fortune*, $1\frac{1}{2}$ mile S.E. by E. This is a fishing village, and the road where the

FORTUNE BAY AND ITS HARBOURS.

the ships lie has 6 to 10 fathoms water, quite exposed to nearly half the compass. It lies S. S. W. from the east end of Brunet.

The *Cape of Grand Bank* is pretty high, and lies one league E. N. E. from Fortune. To the eastward of this cape is *Ship Cove*, where there is good anchorage for shipping in 8 or 10 fathoms water, sheltered from southerly, westerly, and N. W. winds. Grand Bank lies S. E. half a league from the cape; this is a fishing village, and here is no security for shipping.

From the *Cape of Grand Bank* to *Point Enragée*, the course is E. N. E. $\frac{1}{2}$ E. distance 8 leagues: the coast between forms a bay, in which the shore is low, with several sandy beaches, behind which are bar-harbours, fit only for boats, of which the principal is *Great Garnish*, lying $4\frac{1}{2}$ leagues from the *Cape of Grand Bank*; it may be known by several rocks above water lying before it, at two miles from shore, the outermost of which are steep-to; but between them and the shore are dangerous sunken rocks. To the eastward, and within these rocks, is *Frenchman's Cove*, where small vessels may anchor in 4 or 5 fathoms water, tolerably well sheltered from the sea winds. The shore is bold all the way from *Point May* to *Cape of Grand Bank*, there being 10 or 12 fathoms within 2 cables' length, and 30 or 40 at a mile off: between the latter and *Great Garnish* the water is not so deep, and ships may anchor any where in 8 or 10 fathoms water, sheltered only from the land-winds.

From *Point Enragée* to the head of the bay, the course is first is E. N. E. $\frac{1}{2}$ E. 3 leagues to *Grand Jervey*; then E. $\frac{1}{2}$ N. $7\frac{1}{2}$ leagues to the head of the bay.

Seven leagues to the eastward of *Point Enragée* is the *Bay L'Argent*, where there is anchorage in 30 or 40 fathoms water, sheltered from all winds.

Harbour Millée.—The entrance of *Harbour Millée* lies to the eastward of the east point of *L'Argent*. Before this harbour, and the *Bay L'Argent*, is a remarkable rock, which at a distance appears like a shallop under sail. *Harbour Millée* branches into two arms, one lying to the N. E. the other to the east; at the upper part of both is good anchorage. Between this harbour and *Point Enragée* are several bar-harbours, in small bays, wherein are sandy beaches: but the water all along the coast is very deep.

Cape Millée lies N. E. $\frac{1}{2}$ E. one league from the Shallop rock above mentioned, and near 3 leagues from the head of *Fortune Bay*; it is a high reddish barren rock. The width of *Fortune Bay* at *Cape Millée* does not exceed half a league; but, immediately below it, it is twice as wide, by which the cape may readily be known; above this cape the land on both sides is high, with steep craggy cliffs. The head of the bay is terminated by a low beach, behind which is a large pond, or bar-harbour, fit only for boats.

Grand L'Pierre is a good harbour, situated on the north side of the bay, half a league from the head. The entrance cannot be seen until you are abreast of it; there is no danger in going in, and you may anchor in any depth from 8 to 4 fathoms, sheltered from all winds.

English Harbour lies a little to the westward of *Grand L'Pierre*; and to the westward of *English Harbour* is the *Little Bay de l'Eau*, both of which are small.

New Harbour is situated opposite *Cape Millée*, to the westward of the *Bay de l'Eau*; it is a small inlet, and has good anchorage on the west side, in from 8 to 5 fathoms, sheltered from S. W. winds.

The *Harbour Femme* lies half a league to the westward of *New Harbour*; and one league to the westward of *Harbour Femme* is *Brewer's Hole*, fit only for boats.

Harbour la Conte is situated one mile to the westward of *Brewer's Hole*, before which there are two islands, one without the other. The best passage in is on the west side of the outer island, and between the two; as soon as you begin to open the harbour, keep the inner island close on board, to avoid some sunken rocks that lie near a small island, which you will discover between the N. E. point of the outer island, and the opposite point on the main: also another rock which appears at low

low water, and lies higher up on the side of the main. So soon as you are above these dangers, you may keep in the middle of the channel, and will open a fine spacious harbour, wherein you may anchor in any depth, from 6 to 16 fathoms water, on a bottom of sand and mud, shut in from all winds.

LONG HARBOUR lies 4 miles to the westward of Harbour la Côte, and N.E. by E. 5 leagues from Point Enragée. It may be known by *Gull Island*, which lies at its mouth, and a small rock, which lies half a mile without the island, and has the appearance of a small boat: this harbour runs 5 leagues into the country, but the only anchoring is in *Morgan's Cove*, on the N.W. side of the harbour, about 2 miles within Gull Island, in 15 fathoms water, unless you run above the Narrows.

A little to the westward of Long Harbour is *Belle Bay*, which extends about 3 leagues each way, and contains several bays and harbours. On the east point of this bay is *Hare Harbour*, fit for small vessels only.

Two miles to the northward of Hare Harbour is *Mal Bay*; and, to the westward of Mal Bay, near the shore, lie the *Rencontre Islands*, the westernmost of which is the largest, and has a communication with the main at low water.

Belle Harbour lies 4 miles N.W. by N. from the westernmost *Rencontre Island*; it is but an indifferent harbour. About $1\frac{1}{2}$ of a mile westward of Belle Harbour is *Lally Cove*, fit for small vessels only, behind an island; the west point of this cove is high and bluff, and is called *Lally Head*: to the northward of this head is *Lally Cove Black Cove*, where ships may anchor in 14 or 16 fathoms water.

Two miles to the northward of Lally Cove Head, is the Bay of the *East*, and the Bay of the *North*; in both of these there is deep water, and no anchorage near the shore.

The Bay of *Cinq Isles* lies to the southward of the North Bay, and opposite to Lally Cove Head; there is tolerably good anchorage for large ships on the S.W. side of the islands, in the bottom of the bay. A little to the southward of the Bay of Cinq Isles is *Corben Bay*, where there is good anchorage for any ships in 22 or 24 fathoms water.

About two miles south-eastward from Lally Cove Head are two islands, about a mile from each other; the north-easternmost is called *Belle Island*, and the other *Dog Island*; they are bold to all round.

Between Dog Island and *Lord and Lady Island*, which lies off the south point of Corben Bay, something nearer to the latter, is a sunken rock, with deep water all round it; and about a quarter of a mile to the northward of Lord and Lady Island, is a rock, which appears at low water.

Bande de L'Arier Bay lies on the west point of Belle Bay, and N. $\frac{1}{2}$ W. 3 leagues from Point Enragée; it may be known by a very high mountain over the bay, which rises almost perpendicular from the sea, called *Iron Head*. *Chapel Island*, which forms the east side of the bay, is high land also: the harbour lies on the west side of the bay, just within the point formed by a narrow low beach, and is a snug place: between the harbour and Iron Head there is tolerably good anchorage, in 18 or 20 fathoms.

Bande de L'Arier Bank has 7 fathoms water on it, and lies with the beach of Bande de L'Arier Harbour just open of the west point of the bay, and Boxy Point on with the north end of St. Jacques Island.

Two miles to the westward of Bande de L'Arier, is the harbour of *St. Jacques*, which may be readily known by the island before it being high at each end, and low in the middle. The passage into the harbour is on the west side of the island, free from danger, as is the harbour, where you may anchor in from 17 to 4 fathoms.

About $1\frac{1}{2}$ mile westward of St. Jacques, is the harbour of *Blue Pinion*; a little to the westward of which is English Cove.

Boxy Point lies W. $\frac{1}{2}$ S. 8 miles from St. Jacques Island, and E.N.E. $\frac{1}{2}$ E. $12\frac{1}{2}$ miles from the east end of Brunet Island; it is of a moderate height, and the most advanced to the southward of any land on the coast. Boxy Harbour lies N.E. 3 miles from Boxy Point, in which there is anchorage in 4 or 5 fathoms water, fine sandy ground.

HARBOUR BRITON, &c.

W.N.W. one mile from Boxy Point, is the *Island St. John*, and N.N.W. half league from *St. John's Island* is *St. John's Head*, high, steep, and craggy. Between *St. John's Head* and *Boxy Point* is *St. John's Bay*, quite exposed.

On the north side of *St. John's Head* are two rocky islets, called the *Gull* and *Shag*, at the west end of which there are several sunken rocks.

The *GREAT BAY DE L'EAU* is about $1\frac{1}{2}$ league to the northward of *St. John's Head*. In this bay there is good anchorage in various depths, sheltered from all winds. The passage in is on the east side of the island, which lies in its entrance.

To the westward of *Bay de l'Eau*, at about 3 miles north from *St. John's Head*, is *Little Bay Barryway*, on the west side of which there is good anchorage for large ships in 7, 8, or 10, fathoms.

HARBOUR BRITON lies to the westward of *Little Barryway*, N.N.E. $1\frac{1}{2}$ league from the *Island of Sagona*, and N.E. by N. from the east end of *Brunet*. The heads which form the entrance are pretty high, and lie from each other S.E. and N.W. distant about 2 miles. Near the east head is a rock above water. The only danger in going in, is a ledge of rocks which stretch two cables' length from the south point of the S.W. arm, which is more than a mile within the west head. The only place for king's ships to anchor is above this ledge, before the entrance of the S.W. arm, in 16 or 18 fathoms, mooring nearly east and west; the bottom is very good, and plenty of wood and water is to be obtained here.

Opposite to the S.W. arm is the N.E. arm, or *Jerseyman's Harbour*, which is capable of holding a great number of ships, secure from all winds, in 6, 7, and 8, fathoms water: it has a bar at the entrance, on which there are 3 fathoms. The mark to sail over the bar is, the point of *Thompson's Beach*, which is the south point, at the entrance into the S.W. arm, open of *Jerseyman's Head*, which is high and bluff, at the north side of the entrance into *Jerseyman's Harbour*; so soon as you open the harbour, haul up to the northward, and anchor.

From the *West Head of Harbour Briton* to *Connaigre Head*, the bearing and distance are W. $\frac{1}{2}$ N. $5\frac{1}{2}$ miles; between are *Gull Island* and *Deadman's Bay*, off which there is a bank stretching from the shore between 2 and 3 miles, whereon the depths vary from 34 to 4 fathoms.

CONNAIGRE BAY. From *Connaigre Head*, which is high and craggy, to *Basse-terre Point*, the bearing and distance are N.W. $\frac{1}{2}$ W. 7 miles; between is *Connaigre Bay*, which extends about 4 leagues inland. In the mouth of the bay lie the *Connaigre Rocks*, above water, which may be approached very near, there being no danger but what shews itself: the channel between them and *Connaigre Head* is the safest, as a ledge of rocks extends a mile from the north shore, which renders the other channel rather dangerous.

Connaigre Harbour is near 5 miles above the Head, within a point on the south side of the bay; it is very small, and the depth of water is 7 fathoms; the passage in is on the S.E. side of the island, which lies before the west end of this harbour, nearly in the middle of the bay, are two islands; and on each side of the westernmost, are some rocks above water.

Dawson's Cove is on the N.W. side of the bay, and bears N.N.E. about 4 miles from the head, and W.N.W. 2 miles from the west end of the westernmost (and the greatest) island: the anchorage is in 6 or 5 fathoms, quite exposed to southerly winds.

From *Basse-terre Point*, which is clear of wood, to *Pass Island*, the bearing and distance are N.W. by N. one league. This island forms the N.W. extremity of *Fortune Bay*, it lies very near the shore, and is above a mile long. On its S.W. side are several rocks above water, which extend a mile off; and on the N.W. side is a sunken rock at a quarter of a mile from the island.

In the night time, or in foggy weather, too great dependance should not be placed on the soundings in *Fortune Bay*; for there is more water in many parts near the shore, and in several of its contained bays and harbours, than in the middle of the bay itself.

HERMITAGE BAY. From Pass Island to the west end of Long Island, the bearing and distance are N.E. 8 miles; between is the entrance of *Hermitage Bay*, which extends $7\frac{1}{2}$ leagues east from Pass Island, with very deep water in most parts of it.

Hermitage Cove is on the south side of the bay, about $2\frac{1}{2}$ leagues above Pass Island, opposite which, and nearly in the middle of the bay, lie the two Fox Islands: to go into the cove, keep between the islands and the south shore, where there is not the least danger. In the cove there is good anchorage in 8 or 10 fathoms.

LONG ISLAND, which separates the *Bay of Despair* from *Hermitage Bay*, is of a triangular form, about 8 leagues in circuit. The west entrance into the Bay of Despair from *Hermitage Bay*, is by the west end of Long Island. At about half a mile from its S.W. point, are two rocks above water, with deep water all round them. The east passage is also very good, and is between the east end of Long Island and the main, called the Passage of Long Island.

There are four harbours on the south side of Long Island, the easternmost of which is called *Gulfass*; the latter is but small, and lies near the east point of the island: the best channel into the harbour is on the west side of several rocky islands, which lie at the entrance, wherein are 4 fathoms, but in the harbour are from 15 to 24 fathoms. The next is *Picurre*, which lies N. by E. half a league from the easternmost Fox Island; in going in here, keep near the west point, in order to avoid some sunken rocks off the other; the anchorage is in the first cove on the east side, in 9 or 10 fathoms, sheltered from all winds.

The next harbour, called *Round Harbour*, is only fit for small vessels.

Long Island Harbour is the fourth, and it lies about $2\frac{1}{2}$ miles from the west end of Long Island. This harbour has two arms, one lying in to the north, the other eastward; they are both very narrow, and have from 40 to 7 fathoms water; the eastern arm is the deepest, and affords the best anchorage. The passage in is on either side of an island which lies off the entrance, and has several rocks above water around it, but they are both narrow.

BAY OF DESPAIR. The entrance of the Bay of Despair lies between the west end of Long Island and *Great Jervis Island* (which lies in the mouth of the harbour of that name); the distance between is one mile and a quarter, and midway the bottom is found with a line of 280 fathoms.

The Bay of Despair forms two capacious arms, one extending to the north-eastward, the other northward: in the north arm there is very deep water, and no anchorage excepting in the small bays and coves which lie on each side of it. In the N.E. arm are several arms and islands, and tolerably good anchorage in several places.

GREAT JERVIS HARBOUR is situated at the west entrance into the Bay of Despair; it is a safe harbour, with good anchorage in every part of it, in from 16 to 20 fathoms, secure from all winds, and plenty of wood and water. The passage in is on either side of Great Jervis Island; but the southernmost channel is the safest, there being no danger in it but the shore itself. In the northern channel are several sunken rocks.

BONNE BAY lies about a league to the westward of Great Jervis Head, and N.N.E. 7 miles from Pass Island; it has several islands in its mouth, the westernmost of which is the largest and highest. The best passage in is to the eastward of the largest island, between it and the two easternmost islands. The bay lies in north 4 miles, and there is no danger but what shews itself; you may go on either side of *Drake Island*, which is small, and nearly in the middle of the bay; between which, and 2 small islands on the west side of the bay, within Great Island, there is anchorage in 20 or 30 fathoms; but the best place for large ships is near the head of the bay, in 12 or 14 fathoms, clear ground, and convenient for wood and water. On the N.W. side of Great Island, within the two small islands, is very good anchorage in from 16 to 24 fathoms, secure from all winds; the entrance to this from the bay is to the northward of the two small islands. In sailing in or out of the bay, approach

CHALEUR BAY TO CAPE LA HUNE.

proach not too near the south point of Great Island, as there are some sunken rocks lying at one quarter of a mile from shore.

W.N.W. 4 miles from *Bonne Bay*, is the entrance to the Bays of *FACHEUX* and *DRAGON*: this entrance being very conspicuous at sea, the coast may here be readily known.

Facheux, which is the easternmost branch, lies in N.N.E. 2 leagues, and is one third of a mile wide at the entrance, with deep water in most parts of it. On the west side of the bay are three coves, where ships may anchor in from 10 to 20 fathoms. *Dragon Bay* lies in N.W. one league, and is near half a mile wide, with 60 or 70 fathoms water, and no anchorage excepting near the head.

One league to the westward of *Facheux* is *Richard's Harbour*, a place fit only for small vessels. N.W. by W. one league from *Richard's Harbour* is *Hare Bay*, which runs in N.N.E. about 5 miles, and is about one third of a mile wide, with deep water close home to both shores on all parts of it, except about one league up on the west side, where there is good anchorage, in from 8 to 15 fathoms, with plenty of wood and water; and a small cove about one mile up on the east side, where there are 20 fathoms, with gradual soundings to the shore.

N.W. by W. $4\frac{1}{2}$ miles from *Hare Bay*, and one league N.E. from *Hare's Ears Point*, is *Devil's Bay*, a narrow inlet, extending a league to the northward, with deep water, and no anchorage until you come close to the head.

The *Bay of Rencontre* lies to the northward of *Hare's Ears Point*, and runs in N.W. by W. 2 leagues; it has deep water in most parts of it, and is near half a mile wide at the narrowest part. The anchorage is in 30 fathoms, above a low woody point on the south shore, quite land-locked.

Hare's Ears Point is pretty large, with a ragged rock upon it, which, from some points of view, looks like the ears of a hare. It divides the Bays of *Rencontre* and *Chaleur*, and lies N.W. $\frac{1}{2}$ W. 6 leagues from *Pass Island*.

W.N.W. 2 miles from *Hare's Ears Point* is the *Bay of Chaleur*; which runs in about 2 leagues N.N.W. It is very narrow, and has deep water in most parts.

West, near half a league from the *Bay of Chaleur*, is the *Bay Francois*, a small inlet; and west 4 miles from the *Bay Francois*, on the east side of *Cape la Hune*, lies *Oar Bay*; off the east point of the entrance of the latter is a low rocky islet; and, in the entrance of the bay, is another with a passage on each side of it. The bay runs in northward about 5 miles, and is one-third of a mile wide, with deep water close to both shores all the way up; at the head is a harbour for small vessels.

CAPE LA HUNE is the southernmost point of land on this part of the coast, and lies in latitude $47^{\circ} 31'$. N.W. by W. $\frac{2}{3}$ W. $8\frac{1}{2}$ leagues from *Pass Island*, and N. by W. $\frac{1}{2}$ W. $10\frac{1}{2}$ leagues from *Cape Miquelon*; its figure much resembles a sugar-loaf: this cape may also be known by the high land of *La Hune*, which lies one league to the westward of it, appears pretty flat at the top, and may be seen from a distance of 16 leagues.

The PENGUIN ISLANDS lie S.W. by W. $\frac{1}{4}$ W. 11 miles from *Cape La Hune*, and N.W. $\frac{1}{2}$ N. 10 leagues from *Cape Miquelon*: they are an assemblage of barren rocks lying near to each other, and altogether about 2 leagues in circuit; and may be approached in the day-time to the distance of half a league all round.

E.S.E. $\frac{1}{2}$ E. 7 miles from the *Penguin Islands*, and S. by W. 3 leagues from *Cape La Hune*, lies the *Whale Rock*, on which the sea generally breaks; it is about 100 fathoms in circuit, with 10, 12, and 14, fathoms water close to all round it. From this rock a narrow bank extends, one league to the westward, and half a league to the eastward, with from 24 to 58 fathoms water on it, rocky and gravelly bottom. In the channel between the shore and this rock, and also between the shore and the *Penguin Islands*, are 120 and 130 fathoms of water, muddy bottom, and there is the same bottom and depth of water at one league without them.

LA HUNE BAY lies close to the westward of *Cape La Hune*; it is about 2 leagues deep, and one-third of a mile wide, with deep water in most parts of it; but there

is a sunken rock which lies off the west point of the entrance, nearly one-third of the channel over.

LA HUNE HARBOUR lies half a league to the westward of Cape La Hune; it has an island before its entrance, and is fit only for small vessels.

Four leagues N.W. $\frac{1}{2}$ W. from Cape La Hune, is the entrance of *Little River*, which is about 100 fathoms wide at the entrance, and 10 fathoms deep; a little way up there is anchorage in 10, 8, and 7, fathoms water, good ground. Between Cape La Hune and Little River, the land is tolerably high, and forms a bay, where there are several small islands and rocks above water, the outermost of which lie N.N.E. $\frac{1}{2}$ E. 3 leagues from the Penguin Islands, and are called the *Magnetic Rocks*.

S. by W. $\frac{1}{2}$ W. 7 miles from the entrance of Little River, and N. by W. $\frac{1}{2}$ W. from the Penguin Islands, lie the *Little River Rocks*, which are just above water, with very deep water all round them.

The ISLES of RAMEA, which are of various extent, both in height and circuit, lie N.W. $\frac{1}{2}$ N. $5\frac{1}{2}$ leagues from the Penguin Islands, and one league from the main; they extend east and west 5 miles, and north and south 2 miles, and have several rocks and breakers about them; but more on the south side than on the north. The easternmost island is the largest, and is very high and hilly; the westernmost, called *Columbe*, is a remarkable high round island, of small circuit, with some rocky islands and sunken rocks near it. There is a harbour for small vessels, formed by the islands which lie between Great Ramea and the Columbe, called *Ramea Harbour*, where they may lie sheltered from all winds.

The Ramea Rocks are two in number, close to each other; they lie about south 4 miles from the east end of Great Ramea: W. S.W. one league from these rocks is a small bank with only 6 fathoms water on it; and, nearly in the middle, between Ramea and the Penguin Islands, is a bank with from 14 to 50 fathoms water.

Four miles to the westward of Little River is *Old Man's Bay*, which lies in N.N.E. about 7 miles, and is about a mile wide; the water throughout the bay is very deep; the best anchorage is at the head, in 14 or 16 fathoms.

Musketa Harbour lies about half a league to the westward of Old Man's Bay; it is a snug and safe harbour, but the entrance is so narrow, being only 48 fathoms in breadth, that it is difficult to get in or out.

Fox Island Harbour is formed by an island of the same name; it lies about half a league to the westward of Musketa Harbour; between are several rocky islands and sunken rocks. This is a commodious harbour for small vessels, which may anchor in 8, 9, and 10, fathoms water. You may go in on either side of the island, and there is no danger but what shews itself.

White Bear Bay lies about 2 miles to the westward of Fox Island Harbour, and N.N.E. one league from Great Ramea Island; it has several islands in its mouth. It lies in N.E. $\frac{1}{2}$ N. about 4 leagues, is near half a mile wide in the narrowest part, and has deep water close to both shores in most parts, to the distance of 8 miles up; then the ground rises at once to 9 fathoms, whence it shoals gradually to the head with good anchorage. The best passage into the bay is to the eastward of all the islands. On the S.W. side of *Bear Island*, which is the easternmost and largest in the mouth of the bay, is a small harbour, lying in east half a mile, with from 10 to 22 fathoms of water, but there are several sunken rocks before its mouth, which render it difficult of access.

Six miles to the westward of White Bear Bay, and N. $\frac{1}{2}$ E. from Ramea Columbe, are two small harbours, called *Red Island Harbours*, formed by *Red Island*, which lies close under the land. The westernmost is the largest and best, and has from 6 to 8 fathoms water, good anchorage. In going in, keep the island close on board, the outer part of which is composed of steep red cliffs.

The BURGEO ISLES are a cluster of islands extending about 5 miles along shore, and forming several snug and commodious harbours. They lie about 3 leagues N.W. by N. from Ramea Columbe. To sail into Burgeo from the eastward, the best passage is on the N.E. side of *Boar Island*, which is the northernmost, and lies N.N.W. from Ramea Columbe: S.E. by S. from this island half a league, is a rock, uncovered at

at low water, on which the sea generally breaks; you may go on any side of this rock, the water being deep all round it: so soon as you are to the N.W. of it, keep the north side of Boar Island on board, and steer W. $\frac{1}{2}$ N. for *Grandy's Cove*, the north point of which is the first low point on your starboard bow; haul round that point, and anchor in the cove in 14 fathoms, and moor with a fast on shore. The best place for large ships to anchor in is, betwixt *Grandy's Cove* and a small island, lying near the west point of Boar Island, in 20 or 21 fathoms, good ground, and sheltered from all winds. To sail into *Grandy's Cove* from the westward is dangerous, unless well acquainted: there are several safe passages in from the southward and eastward, between the islands, and good anchorage; and in bad weather all the sunken rocks discover themselves, and you may run in any without fear.

WOLFE BAY extends inwards N.E. by E. one league; the entrance is E. N.E. 2 miles from Boar Island, and two miles to the westward of Red Island Harbour; the east point of the entrance is composed of low ragged rocks, off which is a sunken rock, at the distance of a quarter of a mile. Near the head of the bay is tolerably good anchorage, and plenty of wood and water.

King's Harbour lies round the west point of Wolfe Bay, and lies in N.E. by E. three quarters of a mile; before its mouth is a cluster of little islands. To sail in, keep the east point of the islands on board, and steer N. by W. and North from the entrance of the harbour, and anchor under the east shore in 9 fathoms.

Ha-Ha. On the south side of the islands before *King's Harbour*, and north one mile from Boar Island, is the entrance into the *Ha-Ha*, which lies in W.N.W. one mile, and is about a quarter of a mile broad, with from 20 to 10 fathoms water, and good ground all over. Over the south point of the entrance into this harbour is a high green hill; and a cable's length and a half from the point is a sunken rock that always shews itself. Over the head of the *Ha-Ha*, is *Richard's Head*, mentioned as a mark for running upon *Ramea Shoal*.

About four miles to the westward of the *Burgéo Isles* is the *Great Barrysway Point*, which is low, white, and rocky; and N.E. by E. half a league from this point is the west entrance into the *Great Barrysway*, wherein is room and depth of water for small vessels. Between the *Burgéo Isles* and the *Great Barrysway Point*, are several sunken rocks, some of which are half a league from the shore.

N.W. $\frac{1}{2}$ N. 4 leagues from the *Burgéo Isles*, is the east point of the *Bay of Connoire*: this point is so far remarkable that it rises with an easy ascent to a moderate height, and much higher than the land within it; the west point of the bay is low and flat, and to the westward of this are several small islands. The bay lies in N.E. by N. about a league from the east point to the middle head, which lies between the two arms, and is half a league wide, with 14, 12, 10, and 8, fathoms, close to both shores, good anchorage, and clear ground, but open to S.W. winds. The N.E. arm, affords shelter for small vessels from all winds. To sail in, keep nearest the starboard shore, and anchor before a small cove on that side, near the head of the arm, in 3 $\frac{1}{2}$ fathoms.

The *Bay of Cutteau* lies about 2 leagues to the westward of *Connoire*; its depth will admit small vessels only. Round the west point of *Cutteau* is *Cinq Serf*, wherein are a number of islands, which form several small snag harbours. Right off *Cinq Serf*, about half a league from the shore, is a low rocky island, westward of which is the safest passage into the largest harbour.

Four miles to the westward of the rocky island of *Cinq Serf*, is the harbour of *Grand Bruit*, which is small and commodious; and may be known by a very high remarkable mountain over it, half a league inland, which is the highest land on all the coast: down this mountain runs a considerable brook, which empties itself in a cascade into the harbour. Before the mouth of the harbour are several little islands, the largest of which is of middling height, with three green hillocks on it. A little without this island is a round rock, pretty high above water, called the *Columbe of Grand Bruit*; and a quarter of a mile to the southward of this rock, is a low rock: in the direct line between the low rock and the rocky isles of *Cinq Serf*, half a league from the

the former, is a sunken rock, whereon the sea does not break in fine weather. The safest passage into Grand Bruit is to the N.E. of this rock, and of the islands lying before the harbour, between them and the three islands (which are low, and lay under the shore); and, after you are to the northward of the sunken rock above mentioned, there is no danger but what shews itself. The harbour extends N.N.E. half a mile, and is but a quarter of a mile wide in the broadest part; but it is bold-to on both sides, and has a depth of from 4 to 7 fathoms.

To the westward of Grand Bruit, between it and La Poile Bay, lies the *Bay of Rotte*, wherein are a great many islands and sunken rocks. The southernmost is a remarkable high round rock, called the *Columbe of Rotte*, which lies N.W. by W. $8\frac{1}{4}$ leagues from the southernmost of the *Burgeos*. Between this island and Grand Bruit is a reef of rocks, some above, and some under water, but they do not lie to the southward of the direct line between the islands. Within the islands of *Rotte* there is shelter for shipping.

LA POILE BAY is large and spacious, and has several commodious harbours. It may be known by the high land of Grand Bruit, which is only five miles to the eastward of it; and likewise by the land on the east side of the bay, which rises in remarkably high craggy hills. About $1\frac{1}{4}$ mile S.W. from the east point lies *Little Ireland*, a small low island, environed with sunken rocks, some of which are one-third of a mile off: north, about half a mile from *Little Ireland*, is a sunken rock that shews itself at low water, which is the only danger in going into the bay, excepting such as lie very near the shore.

Two miles within the west point of the bay, and N. $\frac{1}{2}$ W. 2 miles from *Little Ireland*, is *Tweeds*, or *Great Harbour*; its south point is low, and it extends inwards W.N.W. one mile; it is about $1\frac{1}{2}$ cable's length wide in the narrowest part; and the anchorage is near the head of the harbour, in 18 or 20 fathoms, clear ground, and sheltered from all winds. Half a mile to the northward of *Great Harbour*, is *Little Harbour*, the north point of which, called *Tooth's Head*, is the first high bluff head on the west side of the bay; the harbour extends inwards W.N.W. about a mile. In sailing in, give the south point a small berth. You may anchor about half way up the harbour, in 10 fathoms water.

GALLY BOY'S HARBOUR lies on the east side of the bay, opposite *Tooth's Head*; it is small, snug, and convenient for ships bound to the westward. The north point is high and steep, with a white spot in the cliff. To sail in or out, keep the north side on board. You must anchor so soon as you are within the inner south point, in 9 or 10 fathoms, good ground, and sheltered from all winds. One mile to the northward of *Gally Boy's Harbour*, between two sandy coves on the east side of the bay, and nearly two cables' length from the shore, is a sunken rock, that just uncovers at low water.

Broad Cove is about two miles to the northward of *Tooth's Head*, on the same side of the bay. In this there is good anchorage in 12 or 14 fathoms.

About 2 leagues up the bay, on the eastern side, is the N.E. arm, which is a spacious, safe, and commodious, harbour. In sailing in, give the low sandy point on the S.E. side a small berth, and anchor above it where convenient, in 10 fathoms water, good holding ground, sheltered from all winds, and very convenient for wood and water.

Indian Harbour and *De Plate* lie just within the outer west point of *La Poile Bay*; but they are not fit for shipping.

Little Ireland bears from the southernmost of the *Burgeos* N.W. by W. $\frac{1}{4}$ W. $9\frac{1}{4}$ leagues; and lies nearly 12 leagues to the eastward of *Cape Ray*.

From *Little Ireland* to *Harbour la Coue*, and *La Moine Bay*, the course is W.N.W. $\frac{1}{4}$ W. 11 miles; between lies the bay of *Garia*, and several small coves, fit only for small vessels; before these there are several small islands, and sunken rocks lying along the shore, but none of them lie without the above course. In bad weather, all the sunken rocks discover themselves. The bay of *Garia* affords plenty of timber, large enough for building of shipping.

The

The S.W. point of the entrance into Harbour la Coue, called *Rose Blanche Point*, (near to which are rocks above water,) is tolerably high, and the land near the shore over Harbour la Coue and La Moine Bay is much higher than any other land in the vicinity; by this they may be known. La Moine Bay extends inwards N.E. $\frac{1}{4}$ E. about 4 miles, and is one quarter of a mile broad in the narrowest part. Off the east point are some small islands, and rocks above water. In sailing in, keep the west point on board, until you have entered the bay; then edge over to the east shore, and run up to the head of the bay, where you may anchor in 10 or 11 fathoms, good ground: here is plenty of wood and water. To sail into Harbour la Coue, which lies at the west entrance into La Moine Bay, steer in N. N.W. between a rock above water, in the mouth of the harbour, and the west shore; so soon as you are within the rock, haul to the westward, into the harbour, and anchor in 6 or 8 fathoms water, and moor with a hawser on shore; or you may steer into the arm, which lies in N.E. by E. from the harbour, and anchor in 20 fathoms, sheltered from all winds.

To the westward of Rose Blanche Point, is the harbour of the same name; it is small and snug, and the anchorage is in 9 fathoms water.

Mull Face is a small cove 2 miles to the westward of Rose Blanche Point, wherein is anchorage for small vessels in 4 fathoms. Off the west point of the cove are two small islands, and several sunken rocks.

Seven miles to the westward of Rose Blanche Point are the *Burnt Islands*, which lie close under the shore, and are not to be distinguished from it; behind these is shelter for small vessels. On these islands are sunken rocks, some of which are half a mile from shore.

Ten miles to the westward of Rose Blanche Point, is *Coney Bay* and *Otter Bay*, both of which are rendered difficult of access by several sunken rocks without the passage.

W.N.W. $\frac{1}{4}$ W. 4 leagues from Rose Blanche Point, are the *Dead Islands*, which lie close under the shore; in the passage between them and the main is good anchorage for shipping in 6 or 8 fathoms, sheltered from all winds; but it is very dangerous of access to strangers, as there are several sunken rocks in both the east and west entrances.

PORT AUX BASQUE. From the Dead Isles to Port aux Basque the course and distance are W.N.W. about 4 miles; between lie several small islands close under the shore, and there are sunken rocks, some of which are half a mile from shore. Port aux Basque is a small commodious harbour, which lies about $2\frac{1}{2}$ leagues to the eastward of *Cape Ray*. To fall in with it, bring the *Sugar-Loaf* over Cape Ray to bear N.N.W. $\frac{1}{4}$ W. or the west end of the Table Mountain N.N.W. Steer in for the land with either of these marks, and you will fall directly in with the harbour; the S.W. point, called Point Blanche, is of a moderate height, and white; but the N.E. point is low and flat, and has, close to it, a black rock above water. In order to avoid the outer shoal, on which are 3 fathoms, and which lies E.S.E. three quarters of a mile from Point Blanche, keep the said point on board, and bring the flag-staff, which is on the hill over the west side of the head of the harbour, on with the S.W. point of *Road Island*; that direction will lead you in the middle of the channel, between the east and west rocks, the former of which always show themselves, and which you leave on your starboard hand: continue this course up to Road Island, and keep the west point on board, in order to avoid the *Frying-pan Rock*, which stretches out from a cove on the west shore, opposite the island; and, so soon as you are above the island, haul to the E.N.E. and anchor between it and Harbour Island, where you please, in 9 or 10 fathoms, good ground, and sheltered from all winds: this is called the *Road or Outer Harbour*, and is the only anchoring-place for men of war, but small ships always lie up in the *Inner Harbour*. To sail into it, run in between the west shore and the S.W. end of Harbour Island, and anchor behind the said island, in 3 or 4 fathoms. In some parts of this harbour ships can lay their broad-

broadside so near to the shore as to reach it with a plank. This place has been frequented by fishermen for many years.

GRAND BAY lies about 2 miles to the westward of Port aux Basque; there are several small islands and rocks in and before it, the outermost of which are not above a quarter of a mile from the shore, on which the sea generally breaks: it is only fit for small vessels.

From Port aux Basque to Point Enragée the bearing and distance are W.N.W. about a league, and thence to Cape Ray, N.N.W. nearly $1\frac{1}{2}$ league. Off Point Enragée, which is low, and to the eastward of it, are some sunken rocks a mile from the shore, on which the sea breaks.

CAPE RAY is the S.W. extremity of Newfoundland, situated in lat. 47 deg. 38 min. north: the land of the cape is very remarkable; near the shore it is low, but 3 miles inland is a very high Table Mountain, which rises almost perpendicular from the low land, and appears to be quite flat at the top, excepting a small hillock on the S.W. point of it. This land may be seen in clear weather from the distance of 16 or 18 leagues. Close to the foot of the Table Mountain, between it and the point of the cape, is a high round hill, resembling a sugar-loaf, (called the Sugar Loaf of Cape Ray,) whose summit is a little lower than the Table Mountain; and to the northward of this hill, under the Table Mountain, are two other hills, resembling sugar-loaves, which are not so high as the former; one or other of these sugar-loaf hills are, from all points of view, seen detached from the Table Mountain.

There is a sandy bay between Cape Ray and Point Enragée, wherein ships may anchor with the winds from N.N.W. to east, but they must be cautious that they be not surprised with S.W. winds, which blow directly in, and cause a great sea. The ground is not the best for holding, being fine sand. Towards the east side of this bay is a small ledge of rocks, one mile from shore, on which the sea does not break in fine weather. The best place for large ships to anchor in is, to bring the point of the cape N.W. and the high white sand-hill in the bottom of the bay N.E. in 10 fathoms water; small vessels may lie farther in. Be careful not to run so far to the eastward as to bring the end of the Table Mountain on with the sand-hill in the bottom of the bay, by which means the ledge of rocks before mentioned will be avoided.

N.W. $\frac{1}{2}$ W. nearly one mile from the point of the cape is a small ledge of rocks, whereon the sea always breaks; and, one mile to the northward of the cape, close under the land, is a low rocky island: there is a channel between the ledge and the cape, also between it and the island, with 14 or 15 fathoms water; but the tides, which run here with great rapidity, render it unsafe to shipping.

The soundings under 100 fathoms do not extend above a league from the land to the southward and eastward of the cape, nor to the westward and northward of it, except on a bank which lies off Port aux Basque, between 2 and 3 leagues from the land, whereon are from 70 to 100 fathoms, good fishing ground. S.E. $\frac{1}{2}$ S. 8 leagues from Port aux Basque, in the latitude of $47^{\circ} 14'$ north, is a bank, whereon are 70 fathoms.

The Island of St. Paul lies W.S.W. $\frac{1}{4}$ W. $13\frac{1}{2}$ leagues from Cape Ray, in Newfoundland, and E.N.E. $\frac{1}{4}$ E. 4 leagues from the North Cape, of the island of Cape Breton; it is about 5 miles in compass, including the small island at its N.E. end, with 3 high hills upon it, and deep water close to all round.

Cape North is a lofty promontory at the N.E. extremity of the island of Cape Breton; its latitude is $47^{\circ} 4'$ and longitude $60^{\circ} 8'$: the entrance into the Gulf of St. Lawrence is formed by this cape and Cape Ray, and the latter bears from the former E.N.E. $\frac{1}{4}$ E. distant 18 leagues: the depth of water between, excepting near the island St. Paul, is generally above 200 fathoms.

THE TIDES.—Between Cape Chapeau Rouge and Cape Ray, in all the bays, &c. the tide generally flows till 9 o'clock, on full and change, and its perpendicular rise is about 7 or 8 feet on springs; but it must be observed that, the tides are every
E where

CAPE RAY TO COW HEAD.

where greatly influenced by the winds and weather. On the coast, between Cape Chapeau Rouge and St. Peters, the current sets generally to the S.W. On the south side of Fortune Bay it sets to the eastward, and on the north side to the westward. Between Cape La Hune and Cape Ray, the flood sets to the westward in the offing, very irregularly; but generally 2 or 3 hours after it is high water by the shore. The tide or current is inconsiderable, excepting near Cape Ray, where it is strong, and at times sets quite contrary to what might be expected from the common course of the tides, and much stronger at one time than at another, which irregularities seem to depend chiefly on the winds.

CAPE RAY to COW HEAD.

From Cape Ray to Cape Anguille the course and distance are N. $\frac{1}{2}$ E. nearly 6 leagues; Cape Anguille is the northernmost point of land you can see, after passing to the westward of Cape Ray; it has high table land, covered with wood, in the country over it. Between the high land of the two capes the land is low, and the shore forms a bay, wherein are the great and little rivers of Cod Roy; the northernmost is the great river, which is a bar-harbour, fit to admit vessels of 8 or 10 feet draught only at high water. The shore may be approached between the two capes to half a league, there being no danger so far off.

The island of Cod Roy lies $1\frac{1}{2}$ or 2 miles to the southward of Cape Anguille, close under the high land; it is a low, flat, green island, of nearly two miles in compass, in the form of a horse-shoe, forming, between it and the main, a small snug harbour for vessels of 10 or 12 feet draught: the safest entrance to it is from the southward.

South-eastward from the island is *Cod Roy Road*, wherein is very good anchorage for shipping in 8, 7, or 6 fathoms, on a clay bottom. With the south point of the island bearing about W.N.W. and the point of the beach on the inside of the island at the south entrance into the harbour, on with a point on the main to the northward of the island, you will lie in 7 fathoms, and nearly half a mile from the shore: one league to the southward of Cod Roy Island is a high bluff point, called Stormy Point, off which a shoal stretches full half a mile; this point covers the road from the S.S.E. winds, and there is good anchorage all along the shore, between it and the island.

From Cape Anguille to Cape St. George, the course and distance are N.N.E. $\frac{1}{2}$ E. 11 leagues; these two capes form the bay of St. George, which extends inwards E.N.E. 18 leagues from the former, and E.S.E. 11 leagues from the latter; at the head of this bay, on the south side, round a low point of land, is a good harbour, with excellent anchorage in 8, 10, or 12 fathoms water: the river St. George empties itself into this head of the bay, but it is not navigable for any thing but boats.

On the north side of the bay, before the isthmus of *Port-a-Port*, is good anchorage in 7 or 8 fathoms, with northerly winds: from off this place a fishing-bank stretches two-thirds across the bay, with from 9 to 19 fathoms water on it, dark sandy bottom.

CAPE ST. GEORGE lies in latitude $48^{\circ} 28'$ north: it may be readily known, not only by its being the north point of the Bay of St. George, but also by the steep cliffs on the north part of it, which rise perpendicularly from the sea to a considerable height, and by *Red Island* which lies 5 miles to the northward of the cape, and half a mile from the shore: this island is about $1\frac{1}{2}$ mile in length, and of a middling height; the steep cliffs around it are of a reddish colour: there is anchorage with off-shore winds under the N.E. end of the island, before a sandy cove on the main, which lies just to the northward of the steep cliffs, in 12 or 14 fathoms.

From Red Island to *Long Point*, at the entrance into the bay of Port-a-Port, the bearing and distance are E.N.E. $\frac{1}{2}$ E. 7 leagues: from Red Island to *Guernsey Island*,

Island, in the mouth of the Bay of Islands, E.N.E. 16 leagues : from *Red Island* to *Cape St. Gregory*, N.E. by E. $\frac{1}{4}$ E. 20 leagues : and from *Red Island* to *Point Rich*, which is the north point of *Ingornachoix Bay*, N.E. $\frac{1}{4}$ E. 48 $\frac{1}{2}$ leagues.

The land between *Red Island* and the entrance into *Port-a-Port* is rather low, with sandy beaches, except one remarkable high hillock, called *Round Head*, close to the shore, about 3 leagues to the E.N.E. of *Red Island* : but up in the country, over *Port-a-Port*, are high lands ; and, if you are 3 or 4 leagues off at sea, you cannot discern the *Long Point* of land which forms the bay : this bay is capacious, being above 5 miles broad at the entrance, and 4 leagues deep, lying-in to the South and S.W. with good anchorage in most parts of it. *Long Point* is the west point of the bay, it is low and rocky, and a ledge of rocks extends from it E.N.E. nearly a mile ; S.E. by E. $\frac{1}{4}$ E. 4 miles from *Long Point*, and half a league from the east shore, lies *Fox Island*, which is small, but of middling height ; from the north end of this a shoal stretches nearly 2 miles to N.N.E. called *Fox's Tail* ; and, nearly in the middle of the bay, between *Fox Island* and the west shore, lies the *Middle Ground*, on one place of which, near the S.W. end, there are not above 3 or 4 feet water. From the head of the bay, projecting out into the middle of it, is a low point, called *Middle Point*, off which, extending 2 miles N.E. by N. is a shoal spit, part of which dries at low water : this *Middle Point* divides the bay into two parts, called *East* and *West Bays*. From the head of the *East Bay* over to the *Bay of St. George*, the distance is a large quarter of a mile : this isthmus is very low, and on the east side of it is a tolerably high mountain, rising directly from the isthmus, and flat at top ; on the north side of this, and at about 5 miles from the isthmus, is a conspicuous valley, or hollow, hereafter to be used as a mark. N.E. by E. $\frac{1}{4}$ E. above 2 leagues from *Long Point*, and half a league from the shore, lies *Shag Island*, which appears at a distance like a high rock, and is easily to be distinguished from the main ; and W.N.W. about a league from it lies the middle of *Long Ledge*, which is a narrow ledge of rocks stretching E.N.E. and W.S.W. about 4 miles ; the eastern part of them is above water, and the channel into the *Bay of Port-a-Port*, between the west end of this ledge and the reef which stretches off from the west point of the bay, is a league wide.

In sailing in, if coming from the S.W. advance no nearer to the *Long Point* of the bay than $1\frac{1}{2}$ mile, until you have brought the valley, in the side of the mountain before mentioned, (on the east side of the isthmus,) over the east end of *Fox Island*, or to the eastward of it, which will then bear south a little easterly ; you will then be clear of the *Long Point Reef*, and may haul into the bay with safety ; but, if coming from the N.E. without the *Long Ledge*, or turning into the bay, in order to keep clear of the S.W. end of *Long Ledge*, bring the isthmus, or the foot of the mountain, (which is on the east side of the isthmus,) open to the westward of *Fox Island*, nearly twice the breadth of the island, and it will lead you into the bay clear of *Long Ledge* ; and when *Shag Island* is brought on with the foot of the high land on the south side of *Coal River*, bearing then E. $\frac{1}{4}$ S. you will be within the *Long Ledge* : there is also a safe passage into the bay, between the *Long Ledge* and the main, on either side of *Shag Island*, taking care to avoid a small shoal, of 2 $\frac{1}{2}$ fathoms, which lies W. by N. one mile from the island.

To sail up into the *West Bay* and *Head Harbour*, keep the west shore on board, which is bold-to, and in turning between it and the *Middle Ground*, stand no nearer to the middle than into 8 fathoms ; but you may stand to the spit of the *Middle Point* into 6 or 5 fathoms. The anchorage in *West Bay* is in about 8 fathoms, and in *Head Harbour* in about 5 fathoms. The *West Road* lies before a high stone beach, about 2 miles, south-westward from *Long Point*, where you may lie very secure from westerly and N.W. winds, in 10 or 12 fathoms water.

The *East Road* lies between *Fox Island* and the east shore ; to sail up to it, you should keep the high bluff head, which is about a league to the E.N.E. of the island, bearing to the southward of S.E. by E. $\frac{1}{4}$ E. until the isthmus is brought to the eastward of *Fox Island* ; you will then be within the shoal called *Fox's Tail*, and

CAPE RAY TO COW HEAD.

and may haul to the southward, and anchor any where between the island and the main in from 10 to 18 fathoms.

To sail up the east bay, pass between the island and the east shore, and after you are above the island, come no nearer the main than half a mile, until you are abreast of a bluff point above the island, called Road Point, just above which is the best anchorage with N.E. winds, in about 12 fathoms water: and to sail up the east bay, between the Middle Ground and the Fox's Tail, bring the said bluff point on with the S.W. point of Fox Island: this mark will lead you up in the fair way between the two shoals; give the island a berth, and anchor as before, in from 8 to 12 fathoms water.

BAY OF ISLANDS.—From the Long Point at the entrance of Port-a-Port to the Bay of Islands, the bearing and distance are N.E. by E. $\frac{1}{2}$ E. 8 leagues. Be careful to avoid the Long Ledge: the land between is of considerable height, rising in craggy barren hills, directly from the shore. The Bay of Islands may be known by the many islands in the mouth of it, particularly the three named Guernsey Island, Tweed Island, and Pearl Island, which are nearly of equal height with the land on the main. If you are bound for *Lark* or *York Harbours*, which lie on the S.W. side of the bay, and are coming from the southward, run in between Guernsey Island and the *South Head*, both of which are bold-to; but with southerly and S.W. winds approach not too near the *South Head*, lest calms and sudden gusts of wind should proceed from the high land, under which you cannot anchor with safety. There are several channels formed by the different islands, through which you may sail in or out of the bay, there being no danger but what shews itself, excepting a small ledge of rocks, which lie half a mile north-eastward from the north Shag Rock, and in a line with the two Shag Rocks in one. The safest passage into this bay from the northward, is between the two Shag Rocks, and then between Tweed Island and Pearl Island.

From Guernsey Island to *Tortoise Head*, which is the north point of *York Harbour*, and the S.E. point of *Lark Harbour*, the course and distance are S. by W. $\frac{1}{2}$ W. 5 miles: *Lark Harbour* extends inwards W.S.W. nearly two miles, and is one third of a mile broad in the entrance, which is the narrowest part: in sailing into it with a large ship, keep the larboard shore on board, and anchor with a low point on the starboard side, bearing W.N.W., N.N.W., or N.N.E., and you will ride securely from all winds.

From *Tortoise Head* into *York Harbour*, the course and distance are W.S.W. nearly a league; there is good turning room between the Head and *Governor's Island*, which lies before the harbour: but you must be cautious to avoid a shoal which spits off from a low beach point on the west end of *Governor's Island*, called *Sword Point*; there is also a shoal which spits off from the next point of *Governor's Island*, which must also be avoided; *Tortoise Head* just touching *Sword Point* will lead clear of it: in sailing in, give *Sword Point* a berth, passing which, the best anchoring ground is in 10 fathoms, along the sandy beach on the main, with *Tortoise Head* open of *Sword Point*: westerly and S.W. winds blow here with great violence.

Harbour Island lies at the entrance of the river *Humber*, and S. by E. $\frac{1}{2}$ E. 7 miles from *Guernsey Island*; at its S.W. point is *Wood's Harbour*, which is unfit for shipping. The river *Humber*, at about 5 leagues within the entrance, becomes narrow, and the stream is so rapid in some places, for about 4 leagues up to a lake, that it is with great difficulty that even a boat can be gotten up against it. The banks of this river are well clothed with timber.

The *North* and *South Arms* are long inlets, with very deep water up to their heads. On the east side of *Eagle Island*, between the *North* and *South Arms*, is anchorage in 8, 10, or 12, fathoms water. Under the north side of *Harbour Island*, is good anchorage with S.W. winds; and opposite to the S.E. end of *Harbour Island*, on the south side of the bay, is *Frenchman's Cove*, wherein is good anchorage in from 20 to 12 fathoms.

From

From Guernsey Island to *Bonne Bay*, the course is N.E. $\frac{1}{2}$ E. 5 leagues, to Cape St. Gregory, and thence E.N.E. $\frac{1}{2}$ E. 5 leagues to the entrance of Bonne Bay. The land near the shore from the north Snag Rock to Cape St. Gregory is low, along which lie sunken rocks, a quarter of a mile from the shore; but a very little way inland, it rises into a mountain, terminating at top in round hills.

CAPE ST. GREGORY is high, and between it and Bonne Bay, the land rises directly from the sea-shore to a considerable height.

BONNE BAY may be known, at the distance of 4 or 5 leagues, by the land about it, all that on the S.W. side of the bay being very high and hilly, and that on the N.E. side, and thence along the sea-coast to the northward, being low and flat; but, at about one league inland, is a range of mountains, which run parallel with the sea-coast. Over the south side of the bay is a very high mountain, terminating at top in a remarkable round hill. This bay extends inwards E.S.E. nearly 2 leagues, then branches into two arms, one of which runs in to the southward, and the other to the eastward: the southern arm affords the best anchorage; small vessels must anchor just above a low woody point at the entrance into this arm, on the starboard side, before a sandy beach, in eight or ten fathoms water, about a cable's length from the shore; there is no other anchorage in less than 30 or 40 fathoms, excepting at the head of the arm, where there are from 25 to 30 fathoms water: in sailing into the *East Arm*, keep the starboard shore on board; and, short round a point at the entrance, will be found a small cove, with good anchorage in 17 to 20 fathoms, but you must moor to the shore; there is a snug cove also close within the North Point, with anchorage in 6 or 7 fathoms water: in sailing in or out of Bonne Bay, with S.W. winds, come not near the weather shore, lest you should happen to be becalmed, or, should meet with heavy gusts of wind; as the depth of water is too great to admit of your anchoring.

Ten miles to the northward of Bonne Bay is *Martin Point*, pretty high and white, off which, about three quarters of a mile, is a small ledge of rocks, whereon the sea breaks. *Broom Point* is low and white, and lies about a league to the northward of Martin Point; about half a mile W.S.W. from it lies a sunken rock that seldom shews itself; on the north side of Broom Point lies the Bay of St. Paul, wherein vessels may anchor with off-shore winds, but it is quite exposed to the sea-winds.

COW HEAD lies about one league to the northward of the Bay of St. Paul: this is a promontory which has the appearance of an island, it being only joined to the main by a very low and narrow neck of land: about three quarters of a mile off this head lies *Steering Island*, which is low and rocky, and is the only island on the coast between the Bay of Islands and Point Rich. *Cow Cove* lies on the south side of Cow Head, and ships may lie there in from 7 to 10 fathoms, sheltered from northerly and easterly winds. *Shallow Bay* lies on the north side of Cow Head, and has water sufficient for small vessels; at the N.E. side of the entrance is a cluster of rocky islands, extending E.N.E. and W.S.W., and at the S.W. side are two sunken rocks close to each other, which generally shew themselves; they lie a cable's length from the shore, and there is a channel into the bay on either side of them. *Steering Island* lies right before this bay, which you may pass on either side, but come not too near its N.E. end, as there are some sunken rocks extending from it.

S E C T. II.

*The GULF and RIVER of ST. LAWRENCE, from CAPE RAY to QUEBEC.*I. *The GULF of St. LAWRENCE.**

THE entrance of the Gulf of St. Lawrence lies between Cape North, the N.E. point of Cape Breton Island, and Cape Ray, the S.W. point of Newfoundland. The distance between these capes is 18 leagues; and the bearing from the former to the latter E.N.E. $\frac{1}{2}$ E.

At the distance of 4 leagues E.N.E. $\frac{1}{2}$ E. from Cape North, lies the little island of St. Paul, which has three hills upon it, and deep water all around. Hence it may be safely passed on either side. From Cape Ray the bearing and distance to this island are W.S.W. $\frac{1}{2}$ W. 13 $\frac{1}{2}$ leagues.

The following are the POSITIONS of the chief Points in the GULF of St. LAWRENCE, as deduced from the Results of different Observations.

Cape North, the northern point of Cape Breton Island, lat. $47^{\circ} 4'$. longit. $60^{\circ} 8'$.
St. Paul's Island, lat. $47^{\circ} 12'$. longit. $59^{\circ} 30'$.

The latitude of Cape Ray is $47^{\circ} 38'$; that of Entry Island, one of the Magdalens, $47^{\circ} 17'$; that of the Northern Bird Island, $47^{\circ} 54'$; that of Brion, or Cross Island, $47^{\circ} 52'$; that of the Isle of Miscou, on the south side of the entrance of Chaleur Bay, $48^{\circ} 0'$; that of the Isle Bonaventure, $48^{\circ} 30'$. and that of the west point of the Island of Anticosti, $46^{\circ} 48'$.—The S.W. point of the latter lies in lat. $49^{\circ} 22'$, and longit. $63^{\circ} 42'$. Cape Gaspee lies in lat. $48^{\circ} 42'$, and the N.W. end of Anticosti in $46^{\circ} 47'$.

BEARINGS AND DISTANCES.

Cape Ray to the N. side of the Bird Islands, N.W. $\frac{1}{2}$ W. 22 leagues.

Cape Ray to the east point of Anticosti, nearly N.W. $\frac{1}{2}$ W. 45 $\frac{1}{2}$ leagues.

Cape North to the N.E. point of the Magdalen Islands, N. by W. $\frac{1}{4}$ W. 16 leagues.

Cape North to the Bird Islands—North, 18 leagues.

N.E. point of the Magdalen Islands to the Bird Islands, N.E. by E. $\frac{1}{2}$ E. 6 leagues.

East side of St. Paul's Island to the East side of the Bird Islands, N. by W. 18 leagues.

Bird Islands to the eastern end of Brion Island, W. $\frac{1}{4}$ N. 12 $\frac{1}{2}$ miles.

Bird Island to Cape Rosier, N.W. $\frac{1}{4}$ W. 45 $\frac{1}{2}$ leagues.

Cape Rosier to the S.W. point of Anticosti, N.E. $\frac{1}{4}$ E. 13 leagues.

Cape Rosier to the west end of Anticosti, N. $\frac{1}{4}$ E. 20 leagues.

REMARKS AND DIRECTIONS.

Although the Magdalen Islands are more than 15 leagues in extent from E.N.E. to W.S.W. there are no harbours among them capable of affording shelter to shipping. They are inhabited by fishermen. In passing to the eastward of the N.E. end, give it a berth of two miles; as a reef stretches from it to two-thirds of that distance.

* A description of the harbour, &c. in the Gulf of St. Lawrence is reserved for the next section.

In approaching towards the Magdalen Islands, care must be taken to avoid the Pearl's Ledge, which has only 15 feet over it, and which lies with the south-eastern extremities of Entry Island bearing S.W. by W. $\frac{1}{2}$ W. about 6 miles distant.

The *Bird Islands* are small, and not far asunder: in the passage between them is a rocky ledge. They are of moderate height, and white at top. The northernmost is the largest, from the east end of which runs a small ledge of rocks. Between these islands and that of the Isle of Brion, the depth of water is from 4 to 10 fathoms; a sufficient depth for any ships: yet it is generally recommended to pass to the eastward of the Bird Islands, unless a special advantage may be gained by passing between them and Brion Island. In sailing from these islands, towards Cape Rosier, you will have a depth of from 30 to 60 fathoms to the distance of 18 leagues from the islands, and then lose soundings until you approach the cape.

The *Island of Anticosti* has no harbours; but the water around it is, in general, of a moderate depth. To the northward of the island, near the main, lies the *Mingan and Esquimaux Islands*. The westernmost, called Mingan Island, bears from the west point of Anticosti N.E. by E. distant $10\frac{1}{2}$ leagues. The settlement of Mingan is about 7 miles E.N.E. from Mingan Island. The harbour, as shown in the particular plan on the Chart, is between Canatchon Island and the main. There is good ground in it, and from 9 to 15 fathoms, where ships may lie very securely in all weather. There is likewise good anchorage all within the baraket and other islands, and great plenty of cod-fish. It appears to be very convenient for the cod, seal, and salmon, fishery, and has the additional advantage of a level good soil, and profitable Indian trade. The tide flows here, on the full and change, at 3 o'clock, and commonly rises about 10 or 12 feet; but it varies much according to the weather.

From Mingan Island to Esquimaux Island, the bearing and distance are, E.S.E. $\frac{1}{2}$ E. 6 leagues. Esquimaux Island lies about three-quarters of a mile from Esquimaux Point, and from this island to that of *St. Genevieve*, which is the easternmost of the range, the bearing and distance are, E.S.E. $\frac{1}{2}$ E. 6 leagues. Nearly midway between lies the Isle of St. Charles, within the east point of which there is good anchorage, in from 7 to 10 fathoms.

2. The RIVER of ST. LAWRENCE.

The Channel between Anticosti and the main land of Nova Scotia is near 14 leagues broad: and has, in the middle, very deep water. No ground is to be found, in some parts, with 180 or 200 fathoms of line. From the West end of Anticosti a bank extends, the limit of which is not exactly known.

The BAY of SEVEN ISLANDS, on the north side of the river, is a very secure harbour for a number of ships in any wind. Its entrance lies in latitude, $50^{\circ} 14'$ at the distance of 23 leagues N.W. $\frac{1}{2}$ W. from the west end of Anticosti. The principal channel into it is more than two miles wide, and has a depth decreasing from 60 to 30 fathoms. When sailing in, bring the west point of the bay nearly S.N.W. and steer for it in this direction, passing between the islands on either side. When approaching near the point, give it a berth, steering inwards, nearly North, whence you may come to an anchor one mile and a half to the westward of the harbour Point, in from 14 to 9 fathoms.

At this harbour the tide flows, on the full and change days, at half-past six; spring-tides rise 18 or 19 feet; neaps 10 feet. The settlement here was one of the French king's posts for trading with the Indians. Between it and the Mingan Islands there is no anchorage.

In SAILING UP THE RIVER, from the N.W. end of Anticosti to Cape Chat, the course and distance are W. by S. 31 leagues; and thence to the island of St. Barnabe or St. Barnabas, West, and W. by S. 28 leagues. In sailing up, the general

general track is along the south shore, as shown by the ticked line engraved upon the Chart.

A powerful current generally sets downwards from mid-channel: and observe that, abreast of *Manicouagan Shoals*, on the north side of the river, there are strong and irregular eddies, which may set you on them, if you get too far over. Several men of war have been caught in these eddies in a fresh breeze of wind, when not a single ship could answer its helm.—Some drove on-board each other, and it was no without much difficulty that great mischief was prevented, by their running foul of each other, in endeavouring to avoid the danger of driving on the shoals.

On the south side the coast is clear; and upon it there is no visible current. On this side there are soundings from abreast the Paps of Matane upwards: at two leagues from the shore there are from 35 to 30 fathoms, shoaling gradually inwards to 12 and 10 fathoms, which depth is near the shore nearly up to the island of St. Barnabas.

The east end of the *Isle of Bic* lies 3 leagues westward of the west end of St. Barnabas. Bic is a low woody island, about 4 miles from the southern land. Between it and St. Barnabas there is good anchorage all the way, in from 12 to 16 and 18 fathoms water. Between Bic and the main, there are 10 and 12 fathoms. Off the S.E. end of this isle there is a ledge of rocks which appear above water, and are very steep-to. From St. Barnabas to the *Isle of Bic* the course and distance are W. $\frac{1}{2}$ S. 3 leagues. In most places there are 16 fathoms water.

There is good anchorage, in 17 fathoms, muddy bottom, at 4 or 5 miles from shore, on the hank which shoals gradually to 10 fathoms within $2\frac{1}{2}$ miles of it, the east end of the *Isle of St. Barnabas* bearing S.W. $\frac{1}{2}$ S. and the *Isle of Bic* W. by S. There is also good anchorage, in 6 fathoms, about 2 miles S. by W. from the west end of Bic.

To the north-westward of Bic lies the small island called *Biequet*, from the west end of which extends a ledge of rocks, that may be seen at least for two miles; and they probably extend farther. There are, also, rocks off the east end of this island, as there are likewise to the westward of Bic; so that there is no passage between, unless for boats, or very small craft.

Between Cape Chat and the *Isle of Bic* pilots may be obtained: their houses being near *Father Point*.

You will find anchorage in $7\frac{1}{2}$ fathoms, with the highest of Bic hills in a line with the outer part of St. Barnabas, bearing W. $\frac{1}{2}$ S.; and, in 5 fathoms, soft mud, with the outer part of the high land of Bic just without the island.

From the south side of the *Isle of Bic* to the *Isle of Basque* the course and distance are W. by S. and W.S.W. 7 leagues. Between are two very small islands near the south shore, called the *Razade Islands*: they lie at about 5 leagues from Bic and 2 from Basque. At about a league and a half W.S.W. from the west end of Bic, lies the *Alcides Rock*, having only 8 feet over it, and on which the ship of that name struck in the year 1760.

When passing to the southward of Bic, steer W.S.W. $\frac{1}{2}$ W. in 9 and 10 to 16 fathoms; when almost abreast of the *Razade Islands* steer W.S.W. and you will have from 20 to 23, 24, and 26, fathoms at high water, until abreast of the *Isle of Basque*, distance 4 miles, all sandy bottom. Observe that, when coming to the southward of Bic, (especially with little wind,) you will run on the main land, by first tacking W.S.W. therefore steer W. by S. until you deepen to 18 and 20 fathoms, and then W.S.W. if you are not so high as the *Razade Isles*; but if you are, you will be too near the shore.

Westward of Basque lie the islands called Apple Island, Green Island, Red Island, White Island, &c. Basque Island, Apple Island, the rocks between them, the middle of Green Island, and the outermost land in sight, from Apple Island, lie in a line nearly W.S.W. and E.N.E.

There is anchorage at about 4 miles from Basque Island, in 20 fathoms at high water, sandy bottom, with Red Island W. $\frac{1}{2}$ S. the east point of Green Island, S. W. $\frac{1}{2}$ W.

W. $\frac{1}{2}$ W. the middle of Apple Island, S.S.W. $\frac{1}{2}$ W. the west end of Basque, S.S.E. $\frac{1}{2}$ E. and the high land of Bic, E.N.E. $\frac{1}{2}$ N.

Within a cable's length of Basque Island, there is a depth of 10 fathoms, and very near the rocks that lie between Basque and Apple Island, there are 6 fathoms. These rocks are always above water.

Green Island lies about 3 leagues W.S.W. from the Isle of Basque. Off the N.E. end of this island, there is a ledge of rocks, nearly $1\frac{1}{2}$ mile in length, which partly show themselves: there is, likewise, a ledge of rocks off the west end of the island, which lies directly out from it. A lighthouse stands on this island.*

Red Island is a low flat island, lying about 2 $\frac{1}{2}$ leagues N.W. by N. from the middle of Green Island. From Red Island extensive shoals stretch to the north-eastward, whose limits are yet imperfectly known. From abreast of Green Island you will see the east end of Hare Island, with the Brandy-pot isles (which are two little islands at a small distance from it), bearing about W. by S. or W.S.W. The distance from the west end of Green Island to the Brandy Pots, is about 4 leagues.

TIDES, &c.—Off Green Island the ebb-tide runs at the rate of $4\frac{1}{2}$ knots; and, near the island, much stronger. In 17 fathoms it runs at the rate of 6 miles an hour: yet, although the ebb is so strong, and the tide rises much by the shore, the flood is scarcely perceptible.

The ebb-tide about Green Island is so very strong, that it requires a fresh gale of wind to stem it with all sails. The tide of ebb sets directly towards the island, as do the floods (which are but little here) towards the *White Island* ledge; therefore great care should be taken to anchor here in time, in case it should fall calm, and you be near the island, for there are 25 fathoms almost close to the rocks, and foul ground.

From a little below Green Island, till you are near the length of Hare Island, there is a constant and very strong ebb, occasioned by the great discharge of the waters from Saguenay or Saguna river; and even at the east end of Hare Island, the flood is not of more than four hours continuance, and runs so weak, that, if it blows but a moderate gale of wind westerly, the ship will not *rend* to it. In sailing up, it is necessary to keep well to the southward of Red Island, and to the westward of it, before you cross over for the east end of Hare Island, to avoid getting into the stream of Red Island; for, should it fall little wind, the ebb-tide would set you on the shoals of that island, and there is no safe anchoring to prevent driving upon them.

REMARKS made on Navigating up the River, without a Pilot; by an experienced Commander, 1809.

"Being disappointed in obtaining a pilot, as expected, off *Father Point*, I proceeded without one, and found the anchorages, &c. as follow:

"Between *Father Point* and *St. Barnabe Island*, good anchorage in from 12 and 16 to 6 fathoms water; as also all along the south shore, within *Bic Island*, in 10 to 6 fathoms. At about 4 miles to the westward of the west end of Bic, lies the *Alcides* sunken rock, in 10 fathoms water, and on which there are only 8 feet at low water.

"Between *Basque Island* and the East end of *Green Island* is good holding ground all the way, in from 16 to 6 fathoms water.

* This lighthouse, according to an official notice, dated 21st Sept. 1809, will in future exhibit a light, nightly, from sun-set to sun-rise, from the 15th day of April to the 10th day of December, inclusive. According to the advertisement, the lighthouse bears from the adjacent points as follows:

From *Red Island*, E.S.E. $\frac{1}{2}$ S.; *White Island*, E.N.E. $\frac{1}{2}$ E.; *Brandy Pots*, N.E. by E. $\frac{1}{2}$ E. Apple Island, W.S.W.; *Basque Island*, W.S.W. $\frac{1}{2}$ W.; from the shoal at the N.E. end of *Green Island*, S.W. $\frac{1}{2}$ S. and the shoal at the West end of the same island, N.E. $\frac{1}{2}$ E.

"There is no anchorage to be found between *Green Island* and *Red Island*, and thence until you are abreast of *White Island*: it being all rocky bottom and deep water, and the ebb-tide here runs at the rate of seven knots an hour, and sets from the north side of *White Island* directly to the east end of *Green Island*. The flood sets contrarywise, but is much weaker.

"Under the *Brandy Pot Islands* is good anchorage in any depth from 5 to 16 fathoms; mud and sandy bottom; as also between the south shore and *Middle Bank*, and all along the south shore from *Cucana Island* to the *N.E. Pilgrim*.

"All the way within the *Kamourasca Islands* there are shoal water and soft mud, where a ship may be run on shore, with great safety, in case of necessity. Without these islands there is good anchorage all along to *Cape Diable*, in from 5 to 8 fathoms, as shewn on the Chart.

"There is a *white buoy* laid down in the *English Channel*, in 3 fathoms at low water, on the extremity of *St. Roch Sand*; and a *black buoy* on the *Middle Ground*, in 9 feet, at low water. On the shoalest part of this bank there are only 5 feet at low water.

"From *Cape St. Roch* all the way up to abreast of *Goose Island*, towards the south shore, the water is shoal and the ground rough. For, although the anchor will hold well, it is very bad for the cables.

"Abreast of *Goose Island* there is good anchorage in from 8 to 5 fathoms, soft bottom, opposite to, and a little below, the farm-house. There is also good anchorage abreast of the house on *Crane Island*, in 9 to 5 fathoms at low water, soft bottom, at about one quarter of a mile from shore.

"Between *Crane Island* and the west end of *Orleans Island* there is good anchorage all the way, in from 5 to 12 fathoms, soft bottom."

Green Island to the Isle of Coudre.

BETWEEN *Hare Island* and *White Island*, there is a ledge of rocks, as represented on the Chart, and extending at least $2\frac{1}{2}$ leagues from the east end of *Hare Island*. This ledge is dry at low water. In advancing from the upper end of *Green Island*, steer for the *Brandy Pot Islands*; but from the upper end of *Green Island* steer W. by S. to avoid a bank of 9 feet water, which lies about east from the east end of *Hare Island*: with this course you will have 18 fathoms at a little distance from *Green Island*, and afterwards 16 and 14 fathoms. You may approach *White Island Ledge* and the *Brandy Pots* into the depth of 12 or 10 fathoms, far enough from all danger, and anchor, it being all good clay holding ground.

Anchorage in 11 fathoms, clay ground, with the east point of *Hare Island* bearing N.W. $\frac{1}{2}$ W. *Brand Pot Islands* W.S.W. and the east end of *White Island Ledge* in sight, bearing N.N.E.

The *Pilgrims* are high rocky islands, abreast the upper end of *Hare Island*, and near the south main land. Between *Hare Island* and the south shore is a long bank, nearly in mid-channel, and now called the *Middle Bank*. The true extent of the bank is not yet known; there is in some places more water than in others: in one place, at the east end of it, there is no more than 10 feet at low water.

There is likewise a bank or shoal off the S.W. end of *Hare Island*, which extends almost over to the middle bank, and makes the passage very narrow; in which, however, there is depth enough at low water for a ship of great draught.

When passing by *Brandy Pot Islands*, you will find 10 fathoms very near them; and, keeping along by *Hare Island*, at about $1\frac{1}{2}$ mile distance from it, you will have squalling, 14 and 16 fathoms, till you come to three-quarters of the length of *Hare Island*; and then, standing over for the *Pilgrims*, you have shoal water all at once from 7 fathoms to 6, $5\frac{1}{2}$, 5, and $4\frac{1}{2}$ (at one-third flood, you must heave the lead as fast as possible); *White Island* will be almost in a line with the east end of *Hare Island* (between it and *Brandy Pot Island*), and a white house on the south shore,

shore, near the river side, almost shut in with the rocks off the east end of the N.E. Pilgrim.

Though the strong flood-tide here will set you very fast towards the shoal off the S.W. end of Hare Island, yet be very cautious how you steer your ship to the westward, because the water shoalens very much; but haul up to the southward, and you will directly get into 5 or 6 fathoms, the afore-mentioned white house being just in a line with the rocks off the east end of the N.E. Pilgrim, and White Island just open of the east end of Hare Island; it is shoal near the N.E. Pilgrim, therefore it is not proper to come too near it. Being above the N.E. Pilgrim, you may approach the others pretty near, and steer away directly for the great island of Kamourasca, which you will see about S.W. from you; and all along in this direction you will have regular soundings, from 10 or 12 to 14 or 16 fathoms, till near the greatest and north-easternmost Kamourasca; when abreast of it (and very near), you will have very deep water; but at some distance is a very good bank to anchor on, in any depth, from 9 to 14 or 16 fathoms, and good holding ground.

To avoid the *Middle Bank*.

When steering up from Brandy Pot Island, to which you may pass very near, steer along by Hare Island in such a manner that you may see White Island open within Brandy Pot Islands, between them and Hare Island. Keep along in this position until you have a mountain brought in a line with the second Pilgrim*, and then steer directly for them. They will bear about S. by W. $\frac{1}{4}$ W. and with this direction you may cross the bank with safety; then steer away for the Kamourasca Islands, as before.

N.B. It is not safe to cross this bank with a large ship until half-flood.

But the *shortest and most direct passage upwards*, from Green Island, is to the southward of the Middle Bank; as will best appear by reference to the Chart. So soon as Cape Salmon comes open of the S.W. point of Hare Island, steer outward, and pass the N.E. Pilgrim at the distance of three-quarters of a league; then steer directly for the great island of Kamourasca, as above directed.

Coudre Island, &c.

You may moor at Coudre in 17 fathoms coarse sand. Cape Goose just open of the land to the westward of it, bearing E.N.E. $\frac{1}{4}$ E. a considerable fall of water on the north shore N. by W. $\frac{1}{4}$ W. and the east end of Coudre, E.S.E. $\frac{1}{4}$ E. In this place the tide runs very strongly, which causes the ship always to swing round with the sun.

You may also moor at Coudre in 17 fathoms at low water, sand and mud, with Cape Goose, E. by N. $\frac{1}{4}$ N. Cape Torment, S.W. $\frac{1}{4}$ W. the east point of St. Paul's Bay, W. by N. $\frac{1}{4}$ N. and the water-stream on the north shore, North.

Five fathoms water half a mile from Coudre, till almost close to the shore, and then $3\frac{1}{2}$ fathoms at low water-mark, all clear ground.

The tides at Coudre, both at ebb and flood, are very strong; yet at the meadows is good anchorage, but not near the north shore. It is high water at Coudre by the shore at half-past four, at the full and change of the moon, and it runs off in the road an hour longer.

There is a very long reef of rocks running off the N.W. of the island, which are all covered at high water. The bearings from the end of the ledge, are, St. Paul's church (just open) bearing N. 41 deg. W., the E. bluff point of St. Paul's Bay (called Cape Diabie,) N. 27 deg. W., the water-fall on the north shore, N. 27 deg. E., the N.W. bluff point of the island, S. 22 deg. W., and the N.E. bluff of ditto, off which is a reef of rocks, E. 9 deg. N.

* The appearance of this mark is given on Admiral Saunders's large Chart of the river.

N. B. The part of this reef which is dry at low water, lies to the westward, about S.W. and N.E. and the eastward about East and West. Near the length of a cable farther out, are 5 fathoms at low water.

Coudre Island to the Traverse.

ST. PAUL'S BAY lies to the N.W. of Coudre Island. The tide, both ebb and flood, sets into this bay, which is shoal and rocky to some distance off, whence the French have given it the name of the Whirlpool; so that, when passing either up or down the river, it is proper to go as near the reef as you can, to keep out of the contrary current; and, for the greater safety, it is proper to buoy the end of the ledge in about 5 fathoms at low water; it shoals out afterwards pretty gradually. The north cape of the isle of Coudre, kept about a cable's length open of Cape Goose, is a leading mark to carry you clear of the reef; and, if it be clear weather, you will see a little mountain on the south shore near the Kamourascas, which must be brought about midway between Cape Goose and the N.E. end of Coudre, but a little nearer the island than the cape: either of which will lead you between the reef and the whirlpool. If you find that the tide drives you towards the reef, and that you cannot avoid it, be sure to anchor so soon as you shoalen your water to 7 fathoms. If you pass it in about 8 fathoms, which is far enough off, with a breeze of wind to command the ship, you will then be much nearer the island than the main land, and when you have passed it, you will have 16 or 18 fathoms at a convenient distance from the island.

There is a shoal or ledge of rocks off the north shore all the way, from the W. point of St. Paul's Bay, or Cape Raven, to Cape Hog, which is about a league above Cape Maillard. This shoal lies not a great way off, but farther in some places than in others. In coming away from Coudre, and sailing up the river, it is proper to keep three capes, which you will see to the westward, open one of another all the way from Coudre; till you pass the little river settlement, or to bring the church of it to bear N.W. by N. here is a very rocky bottom, and then begins good ground.

From the anchorage at the meadows of Coudre to Cape Torment, the distance is nearly 8 leagues, and the shore forms seven capes, each of which is split at the top. The course is about S.W.

There is anchorage in 16 fathoms sand and mud, with Cape Maillard, distance about $1\frac{1}{2}$ mile, N.W. by N. the south part of Coudre, N.E. $\frac{1}{2}$ E. and Pillar Island, S.E. $\frac{1}{2}$ E.

There is also anchorage at about one mile from the north shore, in 9 fathoms at low water, sand and mud, with the following marks:—Pillar Island, in one with the rocky islet, called the Neptune Rock, bearing about E. $\frac{1}{4}$ S. Cape Goose nearly in one with the S.E. part of Coudre, Cape Torment a little open of *Burnt Cape*, and *Cape Raven* just open of Cape Maillard. The Neptune Rock has about half a cable's length dry at low water, and is very craggy; it is never covered, although the sea may break all over it in bad weather; it lies above 2 miles S.E. from Cape Pelé. The next shoal is *Burnt Cape Ledge*, which lies off Burnt Cape, forming a channel between of little more than half a mile wide, with 8 fathoms water in it. By keeping near the shore, you will be in no danger in going through this channel; a leading mark is the highest of the broken cliffs on the north shore within Coudre, on with the N.W. end of that island; and when abreast of Burnt Cape, be careful that you do not shut in the N.E. end of *Madame Island* with the S.W. end of *Rot Island*.

The best place of anchorage, to wait in for a wind, for passing through the Traverse, is in 12 fathoms, muddy ground, at a quarter of a league from the land, with Cape Torment bearing nearly W. by S.

DIRECTIONS for passing the TRAVERSE.

THE NEW TRAVERSE.—The *Traverse* is the most intricate part of the navigation of the river St. Lawrence, and is now more shoal than formerly. The greatest difficulty will be found between *Burnt Cape* and the place where *St. John's Point* first begins to open of *Point Dauphin*, both of which points are on the island of Orleans. In order to keep clear of *Burnt Cape Ledge*, keep a part of the *Butt*, (which is a high spot of land in the middle of *St. Joachim's Meadow* on the main, to the northward of the east point of the Island of Orleans, and appears like a platform, or island), always shut in behind *Cape Torment*, until *Burnt Cape* bears N. by E. of you. The soundings at the edge of this ledge are very uncertain, for at one cast you may have 5 fathoms, and before you can get another be on shore.

Being past *Burnt Cape*, or when it bears N.N.E. from you, haul over for the *Traverse*. If the points of the shoals are not buoyed, which for greater safety should be done, observe the following marks:—on the south shore, far inland, are the summits of three mountains, the south-westernmost of which is larger than the other two. When you have brought the west end of the westernmost mountain on with the east end of *Rot Island*, you may steer over with them in a line, till you have opened *St. John's Point* of *Point Dauphin*, as aforesaid; or you may bring the east end of the westernmost mountain on with the east end of *Rot Island*; but it should not be brought to the westward of it till you have opened *St. John's Point*. There is also a little round hill to the westward of the afore-mentioned three mountains, which in clear weather may always be seen; this hill kept about a ship's length to the westward of the east end of *Madame*, is the best mark for the *Traverse*, until you have opened *St. John's Point*, as before. Having proceeded with either of these marks on until *St. John's Point* is open a ship's length of *Point Dauphin*, you should then steer for *St. John's Point*, keeping it a little less open as you proceed nearer to the Island of Orleans, to avoid a little shoal that lies off the east end of Orleans, whereon there are not quite 3 fathoms at low water, the mark for which is the entrance of *St. Ann's River*, on with the east point of Orleans. Just as you have *St. John's Point* opening, you will be in the deepest water between Orleans shoal and the shoal off *Burnt Cape*, which is 5 fathoms at low water: keep along by the island at a convenient distance, in 6 or 7 fathoms at low water, within a ship's length of the sands that dry.*

THE OLD TRAVERSE.—The *Old Traverse* is not proper to be made use of, as the passage between the middle shoal and the sand off *Burnt Cape Ledge* is narrow, and you will be so much the longer going across the tide; which may carry you out of the way, if you are not very attentive to the marks. The west end of the middle shoal lies with the west end of the middle mountain on with the west end of *Rot Island*; so soon as the east end of the same mountain comes on, you will be past it, and have the channel open from near the Island of Orleans, to very near the west end of *Rot Island*, and may anchor between Orleans and *Madame Island*, or proceed up the river at pleasure.

To sail through the *Old Traverse*, bring the east end of the westernmost of the three mountains heretofore mentioned on with the east end of *Rot Island*, and proceed towards *Rot Island* until *St. John's church* comes just open of the point; then you will be to the southward of the middle shoal, on which there are only 8 feet at low water, and may proceed towards *St. John's Point*.

The Island of Orleans is nearly 6 leagues in length, from its east to its west point, and lies in the direction of E.N.E. and W.S.W.: its breadth, at the widest part, which is abreast of *St. John's Point*, is $4\frac{1}{2}$ miles: from its east point, the shoal which, with

* The passage of the *Traverse* is now much less used than formerly, as shipping more generally go up through the South Channel, for which directions are given hereafter, from Quebec downwards. See the large Chart of the River St. Lawrence, constructed by order of Admiral Saunders, new edition, 1810, which no one should be without, who navigates this river.

Burnt Cape Ledge, forms the narrow pass, called the New Traverse, stretches off E.N.E. $3\frac{1}{2}$ miles.

From *St. John's Point* to *Point St. Lawrence* the bearing and distance are W.S.W. $5\frac{1}{2}$ miles, and thence to *Point Levy*, West, a little southerly, nearly $2\frac{1}{2}$ leagues.

From *St. John's Point* to *Point St. Lawrence*, there is no danger; and, about a mile from the shore off Orleans, you will have 9, 8, 7, 10, 13, 16, and 18, fathoms water, rocky ground.

From *Point St. Lawrence* westward, you must, in order to avoid the *Shoals of Beaumont*, keep near the island, till you have passed the *Falls of Beaumont*, which are on the south shore, and then keep in the middle of the stream, or rather nearer the south shore, to avoid the *Morandus Rocks*, which lie between *St. Patrick's Hole* and the west point of Orleans. You may anchor at three-quarters of a mile from the south shore in 9 or 10 fathoms, rocky ground, with *Point Levy* bearing W.S.W. and the west point of Orleans N.N.E.: or you may proceed with the tide directly for Quebec, and anchor within 2 cables' length of the town, in 15 fathoms, muddy ground, *Cape Diamond* bearing S.W. by W., and the N.E. end of *Burket Battery* W.N.W. $\frac{1}{4}$ W.

TIDES in the RIVER St. LAWRENCE.

On the full and change days, the tide flows in the river as follows: at Quebec half an hour past 8; at the Isle of Madame, at 8; at Cape Maillard, at 7; the Isle of Coudre, at 6; the *Kamourascas*, at three-quarters past 6; the *Pilgrims and Hare Island*, at 5; the *Bic*, at three-quarters past 3; but here it is not regular.

N.B. From Coudre to Quebec the water falls 4 feet before the tide makes down. At the Isle of Coudre, in spring tides, the ebb runs at the rate of 2 knots. The next strongest ebb is between Apple and Basque Islands. The ebb of the river Sanguina uniting here, it runs full 7 knots in spring-tides.

DIRECTIONS for SAILING from QUEBEC, down the RIVER St. LAWRENCE.

From *Point Levy* to *Point St. Lawrence*, the course is east a little northerly, and the distance $2\frac{1}{2}$ leagues. From *Point St. Lawrence* to *St. John's Point*, the course and distance are $5\frac{1}{2}$ miles E.N.E. and thence to *St. Francis* it is 5 miles N.E. $\frac{1}{4}$ E.

Between *St. John's Point* and *St. Francis*, you should keep along by the island in 6 or 7 fathoms, to avoid the shoal which stretches off from the west end of *Madame Island*. When abreast of *St. Francis*, steer N.E. by N. until *St. John's Point* comes on within a handspike's length of *Point Dauphin*; then proceed, with these points in that direction, until you have brought a little round hill, which is on the south shore, to the westward of three remarkable mountains, about a ship's length to the westward of the east end of *Madame*, or until the east end of the westernmost of the three aforesaid mountains comes on with the east end of *Rot Island*. With either of these marks on, you may proceed towards *Cape Torment*; and, when *Burnt Cape* bears N.N.E. from you, you may steer towards it, and pass it very near, to avoid *Burnt Cape Ledge*, that lies opposite to it.

Having passed *Burnt Cape*, steer along shore for *Cape Maillard*; and, in sailing from *Cape Maillard* to *Coudre*, with the ebb tide, go as near as possible to the point of the *Coudre Reef*, which lies about a league off from the N.W. part of *Coudre*. The north cape of the Isle of *Coudre* kept about a cable's length open of *Cape Goose*, is a leading mark to carry you clear of it; and, if the weather be clear, you will see a little mountain on the south shore, near the *Kamourascas*, which must be brought about midway between *Cape Goose* and the N.E. end of *Coudre*, but a little nearer to the island than the cape, either of which will lead you between the Reef and the *Whirlpool*. You may pass the reef in 8 fathoms water; but, it is necessary to observe that, the first ebb sets directly from the point of the reef towards *Cape Diabla*;

so that, if you have but little wind, you should anchor before you get within two miles of the reef. At half-ebb the tide runs truer through the channel. If you intend to anchor, you should, so soon as you get to the eastward of the point of the reef, haul up for the *Meadows*, otherwise you will not be able to get in good ground.

From Coudre to the Kamourasca the course and distance are E.N.E. $6\frac{1}{2}$ leagues. When you are abreast of the great Island of Kamourasca, you may steer N.E. $\frac{1}{2}$ E. for the Pilgrims, taking care to give the N.E. Pilgrim a good berth, to avoid some foul ground which lies off from it. When you have passed the Pilgrims, you may keep along shore, in 6, 7, or 8, fathoms water, to the southward of the Middle Bank; and, when the east end of Hare Island bears about N.N.W. haul out N.E., or midway between the *Red Island* and the west end of *Green Island*, or more to the northward, or eastward, according to the wind and tide; as the ebb tide sets strong in between *Green Island* and the south shore, but the flood tide is very weak.

From abreast the west end of *Green Island*, at the distance of 2 miles from it, to abreast of the *Isle of Bic*, at the distance of 4 or 5 miles to the northward of it, the course is about N.E. by E. $\frac{1}{2}$ E. and the distance about $12\frac{1}{2}$ leagues. When you have passed the *Isle of Bic*, it is best to haul in for the south shore, in order to avoid the *Manicouagan* shoal. From the *Isle of Bic* to *Cape Chat*, the distance is 39 leagues.

DIRECTIONS for the SOUTH and IBERVILLE CHANNELS, from St. JOHN'S POINT of ORLEANS, downwards.

— THERE is a ledge of rocks lying off the S.W. end of *Madame*, stretching about S. 60 deg. W. from it. These rocks are very dangerous and dry at low water. To ascertain when you are at the end of them, and that the channel is all clear, observe, on the high land by the water-side on the south shore, a windmill and three mountains, a great way back in the country (the same three mountains take notice of for the *Traverse*): when this windmill is brought in a line with the east end of the westernmost of the three mountains, you are just off and on the west end of the shoal.

Continue your course towards *Bell Chasse*, till *Rot Island* comes open to the southward of *Madame* about 2 ships' length; then you may steer directly for the south part of *Crane Island*, the channel being fair and open, until near *Quail Point*, where a shoal begins off the south shore, which extends half way across towards *Crane Island*: to keep clear of this shoal, you should always keep a part of the *Goose Islands* open to the northward of *Crane Island*.

The channel is very near *Crane Island*, and there is good anchorage, clay bottom, in most parts of it, in 7 fathoms water, excepting on the shoal last mentioned, which begins at *Quail Point*. The south shore is every where pretty bold-to, and there is deep water very near *Bell Chasse Islands*. On the north side of the channel, you may run along by your lead in from 5 to 8 fathoms, until you come to the west end of *Rot Island*, to the southward of which, about 2 miles, there is bank of sand, which dries at low water; but, as it shoalens gradually, it may be avoided by keeping the lead going. The *Island of St. Marguerite* is pretty bold, only a few rocks lie off from it, and those not far; the farthest off is a single rock off the S.W. end, and therefore the island should not be approached too near on that quarter. There are likewise some rocks off *Grosse Island*, and it is likewise shoal to the southward of *Madame*, but not far off; but, as it is bold towards the south shore, it is not proper to come near those islands. *Crane Island* is bold-to, and the best of the channel is very near to it. In turning between *St. Marguerite* and the shoal which extends from the south shore, you may stand to the southward, until the *Goose Islands* are almost shut in by the north part of *Crane Island*, and to the northward, until the *Goose Islands* are quite shut in to the northward by the south part of *Moiac Island*, or

or until *Canoe Island* is almost all open to northward of *Moiac Island*, but not quite so far with a large ship.

The bank on the south shore, which begins at *Quail Point*, extends along the south shore to the eastward 12 or 13 leagues, as far as the *River Oval*. A baseline of one mile in length was measured on the south part of *Crane Island*, called *Bread Point*, by which the breadth of the channel, and the extent of the shoal off the South River, were determined as follows:—from the west part of *Crane Island* to *St. Thomas's Church*, 3 miles; from ditto to the *South River Falls*, $3\frac{1}{2}$ miles; and from the same point to the edge of the shoal, in a line with *St. Thomas's Church*, $1\frac{1}{2}$ mile. There is a mark that will carry you clear of the shoals, and in the best of the channel, if the weather be clear enough to distinguish it, which is a high mountain, at a considerable distance on the south shore, in a line with the south part of *Crane Island*, or *Bread Point*, bearing about E. by N. and then you will have all along about 7 fathoms water, good holding ground. The tides here are not so strong as in the north channel.

From *Crane* and *Goose Islands*, you will have 8, 9, or 10, fathoms, strong clay ground. These islands are joined by an isthmus, and make the best road in the river, having very little tide, and sheltered from all winds but E.N.E.

From *Goose Island*, steer for the southernmost rock of the *Pillars*, which you may pass at 2 cables' length in 5 or 6 fathoms at low water. When you are past the southernmost *Pillar*, steer N.E. $\frac{1}{2}$ E., for the easternmost, about $2\frac{1}{2}$ miles. About a quarter of a mile S.E. by S. from the east *Pillar*, there is a rock which is covered every tide, and has 5 fathoms close to it; to avoid which, in sailing down, keep the southernmost *Pillar* open to the northward of *Crane Island*, till you are abreast of the easternmost *Pillar*; then steer N.E. by N. for *Cape Goose* about 6 leagues, keeping the *Paps* in the *Valley* over *Cape Goose*. In this direction you will have the best of the channel, from 5, to 7, 12, and 14, fathoms water, the ground very uneven; but not less than 5 fathoms will be found in traversing the channel, for a mile on each side, till you bring the west end of *Coudre* on the west end of *St. Paul's Bay*; you will then find the channel run more to the eastward, so as to bring the *Paps* over the point of *Cape Goose*, with which mark you will have the same kind of soundings and ground. When you are abreast of *Coudre*, the *Paps* should be brought about two-thirds of the distance from *Cape Goose* to the west point of *Mal Bay*; this is the narrowest part of the channel, and has from 3 to 10 fathoms water in it, shoaling suddenly to the southward to 4 and $3\frac{1}{2}$ fathoms; the whole breadth of the channel here is about a mile, or a mile and a quarter. The bank to the southward forms a point here, and stretches E. by S. or E.S.E. to the eastward of the point about 2 or 3 miles, to the *Point Oval*. On the edge of this bank there are 13 feet at low water, 3 miles from the shore. When on its extremity, you will have a mountain on with *Point Oval*; and, to anchor to the eastward of it, the mountain should be brought at least a mile to the eastward of the *Point*. This point of the bank is now denoted by a white buoy; to the northward of which, on the opposite side, is a black one. These buoys are extremely useful for distinguishing the entrance of the channel when the distant land-marks cannot be seen.

The bank to the northward is very uneven and rocky, and has from 3 to 15 fathoms, which, in a quarter of a mile, will shoalen from 5, 4, and 3. However, by keeping the *Paps* two-thirds of the distance between *Cape Goose* and the west point of *Mal Bay*, as above directed, until the eastern end of *Coudre* bears N.W. by W. $\frac{1}{2}$ W., you will be clear of the north bank, and may steer downwards N.E. by E., or E.N.E., for the *Kamourascas*.

This channel, from the *Pillar Islands* to the eastward, ought not to be attempted with ships of above 16 or 17 feet, without being buoyed, as it runs nearly in the middle of the river. Between *Coudre* and the *South Rock*, the marks are at too great a distance to be seen distinctly, unless in clear weather.

S E C T. III.

The EASTERN COASTS of NEW BRUNSWICK, &c. to the GUT of CANSO, inclusive; with ST. JOHN'S or PRINCE EDWARD'S ISLAND.

GASPE BAY, &c.—Cape Gaspe lies at the distance of between 6 and 7 miles to the southward of Cape Rosier; and Point Plate, or Flat Point, lies nearly 8 miles to the S.S.W. of Cape Gaspe. At the distance of about 5 miles S.E. $\frac{1}{4}$ S. from Cape Gaspe, is a small fishing-bank, with 15 fathoms over it, sometimes called the *Norwich Bank*, around which there is, at a short distance, a depth of 58 and 60 fathoms.

The entrance of Gaspe Bay is formed by Cape Gaspe and Point Plate. In this bay, at the distance of 10 or 11 miles N.N.W. from the entrance, within a point on the southern side, near its head, there is an excellent anchorage in from 9 to 12 fathoms water, sheltered from all winds. There is, also, good anchorage with westerly winds off *Louisa Cove*, on the western side of the bay, at about 6 miles N.W. by W. from Cape Gaspe, in 9 or 10 fathoms. Throughout the bay there is deep water; nearly 50 to 40 fathoms in the middle, and 20 very near the shore on the eastern side: on the western side it shoals more gradually towards the coast. The tide flows until 3 o'clock, on the full and change.

From Point Plate, off which there is a little islet, called Hat Island, the bearing and distance to Bonaventura Island are S. by W. 6 miles. Between lies the bay called Mal-bay or Cod Bay, which is nearly 5 miles in width. Close to the south point of this bay, is the little isle called Percée Isle. The bearing and distance from Bonaventura to Cape Despair are W.S.W. $\frac{1}{4}$ W. 8 miles, and thence to the north end of Miscou Island S.W. $\frac{1}{4}$ S. 9 leagues.

Nearly S.S.E. $2\frac{1}{4}$ or 3 miles from Cape Despair, lies the sunken rock, called the *Leander Rock*, over which there is a depth of 16 or 18 feet water. As this rock lies in the fair-way of ships coming from the northward, with northerly winds for Chaleur Bay, it must be avoided by giving the cape a berth of 3 or $3\frac{1}{2}$ miles.

The bearing and distance from Cape Despair to Point Maione are W.S.W. $\frac{1}{4}$ W. 8 leagues; between these points lie the two coves called Pahou and Petite Pahou, as shewn on the chart.

Point Maione and Miscou Island form the entrance of Chaleur Bay, and bear from each other S.S.E. and N.N.W. distant $4\frac{1}{2}$ leagues. From the entrance of Chaleur Bay to that of Ristigouche Harbour, which is at its head, the distance, on a West and N.W. by W. course, is 23 leagues. The bay is of moderate depth near the shore on both sides, and has towards the middle from 45 to 20 fathoms of water.

In *Ristigouche Harbour* there is good anchorage in from 8 to 12 fathoms, land-locked from all winds; but it is so difficult of access, that it should not be attempted without a pilot. The tide flows here, on full and change, until 3 o'clock, and its vertical rise is $6\frac{1}{2}$ or 7 feet.

The distance from the north point of Miscou Island to the south point of Shippigan is 7 leagues: the course is nearly S.W. by S. From the south point of Shippigan to Trocadre, the course and distance are S.W. by W. $4\frac{1}{2}$ leagues. From Trocadre to Point Escuminac, on the south side of the entrance of *Miramichi Bay*, the course is S. by W. $\frac{1}{4}$ W. distance 9 leagues.

MIRAMICHI is a large harbour, in the mouth of which there are several islands; between the northernmost of these islands, called Waltham, or Portage Island, and the next to it, called Fox Island, is the passage into the bay, which is intricate and shallow at low water. Hence it is requisite to have a pilot. The pilots' houses stand within Escuminac Point, and sometimes pilots for this place may be found in the Gut of Canso. Considerable quantities of timber have been recently shipped in this harbour. The Custom-House is situate on the north side of the river, 5 leagues within the entrance.

From the northern part of Miscou Island to Escuminac Point the soundings are regular; and, in thick weather, the shore may be approached by the lead to the depth of 12 or 10 fathoms.

From *Escuminac Point* to the entrance of *Richibucto Harbour*, the course and distance are S. by W. $\frac{1}{2}$ W. 7 leagues: from *Richibucto Harbour* to the entrance of *Buchtuch*, S. $\frac{1}{2}$ W. $6\frac{1}{2}$ leagues: from *Buchtuch* to *Cocaigne Harbour*, S. by W. 5 miles: from *Cocaigne* to *Shediac Harbour* nearly the same course, 6 miles: and, from *Shediac* to *Cape Tormentin* the coast trends E.S.E. $\frac{1}{2}$ E. and S.E. by E. $\frac{1}{2}$ E. 10 leagues. The harbours here mentioned are not of sufficient depth to admit large ships for a lading. At the distance of 4 miles E. by S. from *Cape Tormentin* there is said to be a shoal, having over it a depth of only 6 feet.

Within *Cape Tormentin* is the isthmus and boundary between New Brunswick and Nova Scotia, the narrowest part of which, from the Bay Verte to Cumberland Basin, at the head of *Chignecto Bay*, is only 17 miles in breadth.

RIVER PHILIP.—To the southward of *Cape Tormentin*, at the distance of $4\frac{1}{2}$ leagues, is the entrance of the *River Philip*, a bar-harbour, having only 10 feet at the entrance. In advancing towards this place, when in the depth of 5 fathoms, another harbour will be seen on the eastern or larboard side, which is called *Pugwash*. In the latter, ships drawing 17 feet load timber. This harbour is safe; but the entrance is so narrow as to require a pilot. Ships commonly anchor in 5 fathoms, at 3 or 4 miles from shore, with the entrance bearing S.E.

From *Cape Tormentin* to *Cliff Cape* the course and distance are S.S.E. 7 leagues; from *Cliff Cape* to *Shoal Point* S.E. about 4 miles; and, from *Shoal Point* to *Cape John* S.E. by E. $\frac{1}{2}$ E. about 4 leagues. Between the latter lie *Ramsheg Harbour* and *Frederic Bay*.

RAMSHEG HARBOUR.—The flats extending from each shore, at the entrance of this harbour, leave but a narrow channel, through which, at all times, excepting at slack water, the tide runs with great velocity, and renders the navigation into it very unsafe, although the depth up to the anchorage is sufficient for a frigate; there being, in mid-channel, $3\frac{1}{2}$ fathoms at low water. In sailing in, steer south, westerly, towards *Gravois Cliff*, giving *Shoal Point* a berth of a mile, until the N.W. arm is well open; then steer for the latter, keeping your lead going, until the beach to the N.W. of *Gravois Cliff* bears S.W. by W.

FREDERIC BAY.—On the western side of *Amet Isle* the passage is quite clear; but, in sailing in from the eastward, between *Cape John* and the isle, you should keep nearest to the cape, as a ledge extends from the isle to a considerable distance. *Amet* is a low island, without trees, and it will be most prudent to keep at least three-quarters of a mile from it. The best anchorage for ships is in *Harbour* or *River John*, on the east side, in 4 or 5 fathoms, muddy bottom. Small vessels may run up to *Tatmagouche*, and anchor off *Frederic Town* in 10 or 12 feet at low water. Here the tide rises 5 feet, on full and change, and flows till 7 o'clock.

In coming from the eastward, when between *Amet Island* and *Cape John*, your course toward *River John* will be W. by S. In passing between the island and cape, you will have $4\frac{1}{2}$ fathoms, until you open the *River John*, on the larboard side. You will then have 7, 8, and 9, fathoms; and, if bound for this river, or for *Tatmagouche*, may obtain a pilot, by making the usual signal. There is anchorage at 2 miles from shore.

In

In Ramsheg, Tatmagouche, and John, Harbours, ships of 15 feet draught load timber.

CARIBOU HARBOUR.—From Cape John to Caribou Point the course and distance are E.S.E. 7 leagues. To strangers it may be dangerous to approach Caribou Harbour, as it has frequently been mistaken for Pictou, which lies to the south-westward, and some have run on shore before the error has been discovered. For it is to be observed, the ships are seen riding, not in the entrance of the harbour, but within a sand-bank stretching from side to side, with not more than 3 or 4 feet over it, and which appears like a good channel.

PICTOU HARBOUR.—The entrance of this harbour lies S.W. $\frac{1}{2}$ S. about 6 miles from the west end of Pictou Island. There is no danger in sailing in, but the tide runs very strong in the Narrows. To sail in, bring the east end of Pictou Island E.N.E., and steer W.S.W. until the windmill at Pictou appears at about half a cable's length on Sandy Point, on the larboard hand; the least depth 3 fathoms. When you have advanced to the bar, steer more northerly, until the harbour is fairly open, giving the sandy point a berth of about half a cable: now steer W.S.W. until abreast of the town, where there is anchorage in 6 and 7 fathoms.

Two remarkable trees, near the edge of the bank, on the starboard side of the entrance, being kept in a line, will lead in through the best of the water.

Pictou is the residence of the principal merchants who load timber in these parts.

MERIGOMISH, which is an excellent bar-harbour, lies 9 miles to the eastward of the entrance of Pictou; the merchants of which place have ponds here, for the reception of timber, with which a number of ships are annually laden.

To sail in for this place, bring the east end of Pictou Island N. by E., and keep it so until off the harbour's mouth, where you may either obtain a pilot, or anchor in 4 fathoms. A stranger should not venture to enter the harbour without a pilot, as a ledge stretches off from either side. There is a depth of 18 feet on the bar at low water, and the vertical rise of tide is about 8 feet.

There is no harbour between Merigomish and Cape St. George; but the coast is clear, and vessels may sail along it in safety, at the distance of a mile. At Antigonish, which lies more than 3 leagues to the southward of the cape, small vessels load timber, there being an abundance of fine timber in the neighbourhood; but the harbour is so bad, that ships frequently take in their lading in the bay without, although not safe anchorage.

At **PUNKIDE ISLAND**, 9 miles from Antigonish, ships of any size may load in safety. In sailing in, when from the northward, leave the island on the starboard side, keeping close to a rock, which appears 5 or 6 feet above water. This rock is steep-to, and lies off the east end of the island. Without it, at the distance of three-quarters of a mile, lie several sunken ledges, which are dangerous. After passing the rock, a bay will open on the starboard side, which you stand into, till you are shut in with the island, where there is anchorage in $3\frac{1}{2}$ fathoms water, at about half-a mile from the island.

THE GUT OF CANSO.—The Gut of Canso forms the best passage for ships bound to and from the island of St. John, or Prince Edward, and other places in the Gulf of St. Lawrence. It is shorter, and has the advantage of anchorage in case of contrary winds or bad weather. Its length is about 4 leagues, and breadth more than three-quarters of a mile. The east side is low, with beaches, but the west shore is mostly high and rocky; and that part of it called *Cape Porcupine* is remarkably so. The deepest water is on the western shore; but both shores are bold-to and sound, excepting a *sunken rock*, which lies near a cable's length from the eastern shore, and about midway between the southern entrance of the Gut and Ship Harbour. *Mill Creek, Plaster Cove, Venus Creek, Ship Harbour, Holland Cove, and Eddy Cove*, afford excellent anchorage, in a moderate depth, out of the stream of the tide, which generally sets in from the southward, but is very irregular.

gular, being influenced by the winds. After strong north-west winds, which happen daily during the fall of the year, the water in the Gulf of St. Lawrence is rendered low, which causes the current to run northward through the Gut, at the rate of 4 or 5 knots, and the contrary happens after southerly winds.

CAPE ST. GEORGE, at the entrance of the Gut, lies at the distance of $10\frac{1}{2}$ leagues to the eastward of Pictou Harbour; and a course of 6 leagues, thence to the south-eastward, will lead to the entrance of the Gut, whence you may run along the Cape Breton shore. It is to be observed that, there is a ledge of rocks, off Harbour Bushy, nearly dry at low water, and nearly in the direct course for the Gut; which must, of course, be carefully avoided.

Opposite Mill Creek, at the head of the Gut on the Nova Scotia side, you may stop tide, or lie wind-bound, if it does not overblow. Keep the creek open, and come to anchor in 8 or 10 fathoms, within a cable's length of the steep rocks, on the south side of the creek. The best water is with the creek's mouth open. It will be necessary to carry a hawser on shore to the rocks, to steady the ship, as the tide here runs in eddies. You may water from the creek at low water.

Upon entering the Gut, there will be seen, on the larboard hand, a red house, on a point, called *Belle Ashe's Point*, off which, at nearly a cable's length from shore, there is a sunken rock, which may be readily distinguished by the eddy of the tide. Within this point, on the S.E., is *Plaster Cove*, where shipping frequently anchor.

When abreast of Plaster Cove, the remarkable headland, on the western side, named Cape Porcupine, will bear S.W. To sail into the cove, keep nearly in the middle; and, when in 10 fathoms, let go your anchor. You will find sufficient room for swinging round, in 7 fathoms.

SHIP HARBOUR, which lies about one-third of the way down the Gut, on the eastern side, is a good harbour for merchant-shipping. It is, however, more particularly useful to those sailing northward, being a good outlet. It is a very proper place for ships of 16 feet draught. If bound in, from the southward, give the starboard side a berth of a cable's length, (it being flat,) and run in until you shut the north entrance of the gut, and come to anchor in 4 or 5 fathoms, soft bottom; where you may wood on the Cape Breton side, and water on the opposite shore, at Venus Cove: the larboard side of this harbour is bolder-to than the starboard side, and deepest water. On the outside of this harbour, one-third from Cape Breton side, you may anchor in 9, 10, to 13, fathoms, loose ground, in the strength of the tide.

SHIPS BOUND THROUGH THE GUT, from the northward, may proceed through it with safety, by keeping nearly in the mid-channel, there being no danger until they arrive off the south point, called *Eddy Point*; but, from this point extends a long spit of sand, with large round stones, which must be left on the starboard side, at the distance of half a mile from what may be seen above water. The race of the tide will serve to guide you from it.

Having passed the spit of Eddy Point, you may steer to the S.S.E. until abreast of an island which appears covered with green spruce-trees with red bark. Hence you proceed to sea, according to the charts.

Be cautious of running in the direction of a dangerous steep rock, called the *Cerberus*, or *Transport Rock*, with only 10 feet water over it, and on which the sea breaks with a wind. This rock lies with Verte or Green Island in a line with Cape Hoagis, or Iron Cape, on the Isle of Madam, at the distance of about $4\frac{1}{2}$ miles from that island.

At the entrance of the Gut, within a mile of Eddy Point, there is a middle-ground of 7 to 12 fathoms, on which ships may stop a tide, in moderate weather. To the westward of this ground there is a depth of 18 fathoms, and to the eastward, of 20 to 25 fathoms. With the wind inclining from the southward, steer in nearly west, and keep the lead going, until you shoalen to 11 fathoms, when you may let go your anchor.

INHABITANT BAY, &c.—Those who wish to anchor in Inhabitant Bay of Harbour, may bring the farm that is opposite to Bear Head* open, Bear Head bearing W.S.W. This mark will lead you clear, and to the southward of the Long Ledge,† and in mid-channel between it and the steep rocks on the east or opposite shore; at the same time, take your sounding from the Long Ledge, or north shore, all the way till you arrive at Flat Point; then keep in mid-channel between Flat Point and the island opposite, from the N.E. side of which runs off a spit or ledge of rocks, at the distance of a cable and a half's length; then port your helm, and run under Island Point, and come to in 5 fathoms, muddy bottom. Up the river of Trent are plenty of salmon, in the season, and there you may wood and water.

N.B. The leading-mark to clear the steep rocks of Steep Point is, to bring the peninsula in a line over the point of Turbalton Head, bearing S. or S. $\frac{1}{2}$ E. until you open the island to the northward of Island Point; then haul up for the outer harbour, and come to in 10 or 12 fathoms, muddy bottom. On the Nova Scotia and Cape Breton side of the Gut are several small farms.

Those who are bound up the Gut of Canso, and taken short by a N. or N.W. wind at the south end of the Gut, and who are desirous of good and safe anchorage, in 10 to 12 fathoms water, may come to on the north side of Bear Island; but should it blow hard, to a gale of wind, down the Gut, this anchorage is not altogether so secure as a careful master or pilot could wish. You must then leave the road of Bear Island, and sail round the south end of Bear Point, giving a berth to the spit that runs off it, of 3 cables' length, and haul round to the N.E. into Sea Coal Bay, and come to anchor in 4, 5, or 6, fathoms, sandy and muddy bottom.

Marks for anchoring, viz. bring Bear Head in a line over Flat Head, bearing W.S.W., or W. by S., and Cariton Cliffs to bear N. by E. or N. in 5 or 6 fathoms, and you will have a good berth, sheltered from the W.N.W. and N. winds. Here is sufficient room to moor 10 or 12 sail of any of His Majesty's ships of war of the sixth to the third rate.

Ships coming down the Gut of Canso, which may have reached past Eddy Point, or as far as Cape Argos, and caught with a S.E. to S.S.W. wind, and cannot hold their own by beating to windward, may bear up and come to anchor in Turbalton Bay, under Turbalton Head, where they may ride safely in from 5, 6, or 7, fathoms water, muddy bottom. The marks for anchoring in Turbalton Bay are, to bring the peninsula point in a line over Turbalton Head, bearing S. or S. $\frac{1}{2}$ W. or a point of land inland, a little up in the country from Cape Argos shore, with pine-trees on it, open to the eastward of the Red Head; or the said point of land with pine-trees on it, over the pitch or point of Turbalton Head; you are then sheltered by the rocks or spit that runs from Turbalton Head, in 4 to 5 and 6 fathoms water, and will ride very safely on good holding ground. But should the wind shift to the S.W., W., or N.W., you must take up your anchor, and beat out of the bay into Chedabucto Bay, and proceed on your passage to the southward. Should the wind over-blow at S.W. so as to prevent your beating to windward into Chedabucto Bay, you may come to an anchor in Eddy Cove, bringing the low point of Eddy Point to bear S.S.E. or S. by E. in 5, 6, or 7, fathoms water, taking care to give the ship sufficient cable, lest you drive off the bank into deep water, from 15 to 20 fathoms.

ST. JOHN'S or PRINCE EDWARD'S ISLAND.

THE climate of this island is healthy and temperate, not subject to fogs, so frequent in Newfoundland, nor to the sudden changes of weather experienced in England. The winter here sets in about the middle of December, and continues

* Bear Head is the south-easternmost point of the Gut.

† See the Charts of Inhabitant Bay and Harbour, and of the Island of Cape Breton, by Mr. Backhouse, published by the Proprietors of the present work.

until April; during which period it is colder than in England; generally a steady frost, with frequent snow-falls, but not so severe as to prevent the exertions of the inhabitants in their various employments. The weather is generally serene, and the sky clear. In April, the ice breaks up, the spring opens, the trees blossom, and vegetation is in great forwardness. In May, the face of the country presents a delightful aspect. Vegetation is so exceedingly quick, that, in July, peas, &c. are gathered which were sown in the preceding month. The season of harvest is equally fine, and more serene and regular than in England. The country is generally level, and abounds with springs of fine water, groves of trees, which produce great quantities of excellent timber, &c. The greater part of the inhabitants are employed in farming and fishing. Charlotte Town, situate between York and Hillsborough Rivers, on the southern side of the island, is the seat of Government.*

The coast forms numerous harbours, many of which are, however, fit for small vessels only. The principal loading ports at present are, *Cardigan Bay*, or the *Three Rivers*; on the eastern side, *Murray Harbour*; on the S.E. *Hillsborough Bay and River*, and *Bedeque Bay*, on the southern side; and *Richmond Bay* on the north.

CARDIGAN BAY, or the *Three Rivers*, lies between Boughton Island and Panmure Island: it is the common entrance to three rivers; namely, Cardigan River, Brudenell River, and Montague River. In the former there are from 7 to 3 fathoms water, and in the others from 4 to 2 fathoms. *George Town* stands on a peninsula between the rivers Brudenell and Cardigan. In these places many large ships have loaded timber. There is anchorage without, in Cardigan Bay, in from 10 to 15 fathoms, where a pilot may be obtained.

MURRAY HARBOUR lies close to the north-westward of Bear Cape; and the entrance is narrow and shoal, difficult of access, and not having more than 12 feet water. But small ships have frequently loaded here.

HILLSBOROUGH BAY is the finest bay in the island, and the River Hillsborough is a fine navigable river; but timber here is not plentiful. Before Charlotte Town, in this river, there is good anchorage in from 6 to 9 fathoms.

BEDDEQUE BAY, which lies between Cape Egmont and Carlton Point, has good anchoring ground in from 6 to 8 fathoms. The harbour will admit ships of 400 tons, but the channel is narrow, crooked, and requires a pilot. It is the chief port for loading timber: but the water freezes much sooner than at Pictou, or the harbours on the Nova Scotian coast.

BETWEEN CAPE EGDMONT and WEST CAPE, in Halifax or Egmont Bay, where there is good anchorage with northerly and easterly winds in 6 or 8 fathoms.

From the **NORTH CAPE** of the island a shoal spits off nearly 2 miles, close to which there are 4 fathoms of water, and the ground is flat much farther off, there being only 6 fathoms water at the distance of 8 or 9 miles from the cape.

All the inlets on the north side of the island have bars at their entrance, with from $1\frac{1}{2}$ to 3 fathoms over them, and are not to be attempted by strangers without a pilot.

RICHMOND BAY is, however, well sheltered, and has sufficient depth for large ships. On approaching, a pilot will come off, upon the usual signal.

There is a reef extending from the East Point of the island to the distance of 3 or 4 miles, and which should not be approached in the night nearer than to the depth of 17 or 18 fathoms.

* See the description attached to the chart of this island, published by Laurie and Whittle.

S E C T. IV.

The ISLAND of CAPE BRETON, with CHEDABUCTO BAY, &c.

PORT HOOD, commonly called Jestico, situate on the N.W. side of Cape Breton, at the entrance of the Gut of Canso, between Cape St. George and Henry Island, on the Cape Breton side, is a safe harbour for frigates with any wind: the anchorage is in from 4 to 5 fathoms, mud and sandy bottom: here you may wood and water. The leading-mark going in is, Cape Linzey on with the highest sand-hills that are on the N.N.E. side of the beach, bearing N. by E. or N.N.E.; these kept in a line will lead you clear of Spithead, in 4 to 6 fathoms. On the opposite shore is a long and broad flat, stretching from the shore three quarters of a mile, called the Dean, to which come no nearer than in 4 fathoms. Cod-fish is dried on this beach; and, in the season, June and July, is a good herring fishery. (See the chart of the harbour by Mr. Backhouse.)

ST. ANNE'S HARBOUR, situate on the N. E. side of the island, was called by the French, when in their possession, Port Dauphin, in honour of the heir to the crown, and is a very safe and spacious harbour. It has but a narrow entrance, and carries 4½ fathoms at low water, until you join the beach. When in mid-channel, you will have 9 to 10 fathoms, and in the harbour from 5 to 10 fathoms, muddy bottom. On the north side the land is very high, and ships of war may lie so near the shore that a water-hose may reach the fresh water, and a ship may be loaded in one day from a cascade which runs from the top of the rock. The Guernsey and Jersey men dry their fish on this beach; and it is a safe retreat from sea.*

The more particular Directions for St. Anne's Harbour, as given by Mr. Backhouse, are as follow: After you have passed Hurford, or Cecabaugh Island, on the S. E. side of the entrance, keep the south shore on-board, if the wind be to the S. E.; and, as you approach Passage Point, bring Cape Smoak, which lies to the northward, nearly on with Black Point: steer with these marks in one, until you are nearly abreast of Passage Point, off which lies a sunken rock of 6 feet water, and opposite to which begins the spit of St. Anne's Flat, and the narrowest part of the channel. Now keep a small hummock up in the country, nearest to the shelving high land to the westward of it; which hummock is on the middle land from the water-side, in a line over the fishing hut or fishing stage erected on the beach: this will lead in the best water, until you enter the elbow part of the beach. When advanced thus far in, keep the opening open, (about the size of two gun-ports,) which makes its appearance up the S.W. arm. This opening looks like two steep cliffs, with the sky appearing between them, and will lead you between the beach and the south shore, in mid-channel, through 9 and 10 fathoms, and past the beach-point, off which a spit stretches to the S.W. about two cable's length. Having passed this spit, come to anchor on either side of the harbour in from 5 to 10 fathoms, muddy bottom, and sheltered from all winds.

SYDNEY HARBOUR, formerly called Spanish River, the entrance of which lies 4 leagues to the S. E. of that of St. Anne, is another excellent harbour, having a safe and secure entrance, with soundings regular from sea into 5 fathoms. This place abounds with excellent coal. In going in, give the two points of the entrance a berth of two or three cables' length, approaching no nearer than 6 or 5 fathoms. The soundings are regular to each shore to 5 and 4 fathoms.

In the inner part of the entrance, Beach Point and Ledge, on the south side, are

* See the Survey of the Harbour, by Mr. Backhouse.

steep to;

steep-to; but Sydney Flats, on the opposite side, are regular to 4 fathoms. When past the Beach Point, you may run up the River Dartmouth to the S.W., and come to anchor in any depth you please, to 5 and 10 fathoms, a fine muddy bottom. Here you may wood and water, at the creek or spring, close to Governor Mac Cormick's house. The water is remarkably pure.

This harbour is capable of containing the whole navy of Great Britain. On Flat Point, without the east side of the entrance, it is intended to have a lighthouse, in latitude 46 deg. 17-min. to guide ships into the harbour by night. Fish of various kinds, cod, haddock, &c. are caught on the coast in great abundance. The tide in the harbour flows at 9h. and rises 6 feet. The variation here, as observed in 1798, was $16\frac{1}{2}$ degrees West.

LOUISBURG HARBOUR, situate on the S.E. side of Cape Breton, to the westward of Scatterly Island, is easy of access; you may be soon in, and you may likewise be soon out, if you please. Be careful to avoid the Nag's Head, a sunken rock on the starboard hand going in. The east part of the harbour is the safest; the lighthouse which the French erected is now nearly in ruins, from neglecting to repair it; as is also the town from the same reason; for the inhabitants consist only of a few fishermen. Water is plenty here, but wood is scarce.

N.B. The Nag's Head lies nearly one-third from the lighthouse point, and has no more than 3 feet on it at low water. The larboard side going in is the boldest.

From the entrance of Louisbourg to Guyon Isle, called also Portland Isle, the course is S.W. by W. and the distance more than 3 leagues. Between lies the bay called Gabarus Bay, which is spacious, and has a depth of from 20 to 7 fathoms. Off the south-point of this bay, called Cape Portland, lie the *Cormorants*, a number of islets and rocks, which are dangerous.

CONWAY HARBOUR (commonly called Arochette), in the Isle of Madam, is situate on the N.E. side of Chedabucto Bay. This harbour has been but indifferently surveyed; ships bound to the south from the Gut of Canso, and caught by a S.E. wind, may, in this bay, find shelter by coming to anchor in the bay on the south side, in 6 or 7 fathoms; and, by sounding with your lead, you may find the passage over to the north shore, which is the safest anchorage. The harbour has two entrances. To sail into the easternmost, keep the starboard shore on-board, in order to avoid Henley Ledge; and approach the Seymour Isles no nearer than the depth of 6 fathoms, as you will thus avoid the East-reef, and a small sunken rock, which lie about a cable's length N.E. by E. from it.

CHEDABUCTO BAY is wide and spacious; it is bold-to on both shores; on the north side you will see several red cliffs; this shore is sandy, with regular soundings in the middle of the bay, the water is deep, from 25 to 35, &c. to 50 fathoms. At the head is a small harbour, called Manchester Harbour, used by fishing-crafts, and a sloop of war may go over the bar; at this place there is a settlement.

CANSO HARBOUR is situate on the S.E. side of Chedabucto Bay, and has a passage through from the bay to the south; but I would not recommend ships of war, unless they answer their helms very quick, and even of those, not to such as draw more water than 16 feet, to attempt this passage. His Majesty's ship *Thisbe* moored in this harbour, September the 29th, 1791, and sailed through without any accident. (See the chart of the harbour.)

CROW HARBOUR is situate on the south of Chedabucto Bay, and is capable of containing ships of war of the 6th and 5th rates, merchant ships, &c. Many schooners and sloops resort here in the months of July and August, to take mackerel and herrings.

N.B. On the south side of the beach, I erected a beacon to lead ships clear of the Corbyn rocks, which are incorrectly represented in former charts. Keep this beacon in a line with a remarkable tree upon the high land, and it will lead you also clear of the Rook Island Rock, that lies 25 fathoms from the N.W. point of Rook Island.*

* These are the remarks of Mr. Backhouse.

MAGNETIC COURSES *and* DISTANCES round CAPE BRETON ISLAND, &c.

- From Mill Creek to abreast of Cape Jack,—N.W. to N. by W. 2 leagues.
 From abreast of Cape Jack to Henry Island, at the entrance of Port Hood,—N. by W. 5 leagues.
 From Henry Island to the entrance of Port Hood, or Jestico,—North and N. by E. 4 miles.
 From the N.W. side of Henry Island to the north point of Cape Breton, commonly called Cape North,—N.N.E., N.E., N.E. by E., and E.N.E. 28 leagues.
 From Cape North to Cape Ensume or Cape Smoke,—S.W. to W.S.W. $7\frac{1}{2}$ leagues.
 From Cape Smoke to the entrance of St. Ann's Bay,—S.W. to W.S.W. $4\frac{1}{2}$ leagues.
 From Cecabaw Islands, at the south entrance of St. Ann's Bay, to Flat Point, the south entrance of Spanish River, commonly called Sydney Harbour,—S. by E. 3 leagues.
 From Flat Point to Flint Island,—S.E. 7 leagues.
 From Flint Island to the South end of Scattery Island,—S.S.E. to S. by E. $4\frac{1}{2}$ leagues.
 From Scattery Island to the Island of Nova,—N.W. 4 leagues.
 From the Isle of Nova to Louisburg Harbour,—N.W. by N. 3 leagues.
 From Green Island, (entrance of Louisburg,) to Cape Canso,—W. by S. to W.S.W. 18 leagues.

Along the N.E. coast of Cape Breton, between Scattery Island and Cape Dauphin, the land is low; but, from Cape Dauphin to Cape Ensume, or Cape Smoke, it is high. Between Scattery Island and the entrance of St. Ann's Harbour, you may stand in shore to 15, 10, and 5, fathoms, (clear weather,) gradual soundings.

From Cape Smoke the water is deeper all along to Cape North, close to the shores. From Cape North to Cape Linzey the land is very high in the country, and falls gradually towards the shores in some places. You may stand safely to the distance of 2 leagues off the shore, until you come to Henry Island, when you may stand within 1 mile of the shore. On this side of Cape Breton are several salmon rivers.

In the winter season, when the weather is mild, the S.E., N.E., and N.W., coasts of Cape Breton Island abound with all kinds of fish. Plenty of lobsters and oysters are to be found towards Prince Edward's Island, especially in Hillsborough Bay.

SECT. V.

The SOUTHERN and SOUTH-WESTERN COASTS of NOVA SCOTIA; including the BANKS and SABLE ISLAND.

ISLE of SABLE *and* BANKS of NOVA SCOTIA.

THE southernmost part of Sable Island lies in 44 deg. 0 min. 0 sec. N. latitude; the west end lies in 60 deg. 32 min. 30 sec. W. longitude from Greenwich. On the days of the new and full moon, it is high water along the south shore of the island at half an hour after 8 o'clock, and it flows till half an hour past 10 o'clock on the north side, and till near 11 o'clock in the pond. Common spring-tides rise

H

7 feet

7 feet perpendicular, and neap-tides 4. The flood sets in from the S.S.W. at the rate of half a mile an hour, but it alters its course, and increases its velocity near the ends of the island. At half-flood it streams north, and south at half-ebb, with great swiftness, across the north-east and north-west bars; it is, therefore, dangerous to approach without a commanding breeze. The north-east bar runs out E.N.E. about 4 leagues from the eastern extremity of the island, all which is very shoal, having in few places more than 2, 3, or 4, fathoms water, whence it continues E. and E. by S. deepening gradually to 12, 15, and 18, fathoms water, at the distance of 8 or 10 leagues, and shapeth to the S. and S.E. sloping gently to 60 and 70 fathoms water. To the northward and eastward it is very steep; and, in a run of 3 miles, the water will deepen to 130 fathoms. Abreast the body of the isle, the soundings are more gradual. The shoal ground of the north-west bar shapeth to the westward, and deepens gradually to 70 fathoms water, at the distance of 20 or 25 leagues from the isle; and winds easterly and southerly, until it meets the soundings of the north-east bar. The quality of the bottom, in general, is very fine sand, with a few small transparent stones; to the northward, and close to the north-east bar, the sand is mixed with many black specks; but, near the north-west bar, the sand has a greenish colour. The north-east bar breaks in bad weather, at the distance of 8 and 10 leagues from the island; but, in moderate weather, a ship may cross it, at 5 leagues distance, with great safety, in no less than 8 or 9 fathoms water; and, if the weather be clear, the island may be seen thence very distinctly from a boat. The north-west bar breaks, in bad weather, at 7, and sometimes 8, miles from the island; but, when the sea is smooth, ships may cross it within the distance of 4 miles, in 7 fathoms water. *[These bars are described as they were found; but as they are composed of shifting sands, repeated storms, and the violence of the sea, may, in the course of years, considerably alter their form and extent.]*

Along the north and south sides of the island are many spits of sand, extending nearly parallel, and within a mile from the shore. Vessels may anchor on the north side of the island, between the spits, and not be liable to be driven off by southerly winds. On the south side, it is boldest off the body of the island, having 10 or 12 fathoms water, within a mile of the shore; but, towards the bar, it is more shoal, and dangerous to approach; for the currents, which are uncertain, are, in a great degree, influenced by the winds which have preceded. The surf beats continually on the shore, and, in calm weather, is heard several leagues off. Landing on this island with boats is practicable on the north side, after a continuance of good weather only. The whole island is composed of fine white sand, much coarser than any of the soundings about it, and intermixed with small transparent stones. Its face is very broken, and hove up in little hills, knobs, and cliffs, wildly heaped together, within which are hollows and ponds of fresh water; the skirts of which abound with cranberries the whole year, and with blue berries, juniper, &c. in their season; as also with ducks, snipes, and other birds. This sandy island affords great plenty of beach-grass, wild peas, and other herbage, for the support of the horses, cows, hogs, &c., which are running wild upon it. It grows no trees; but abundance of wreck and drift-wood may be picked up along shore for fuel. Strong northerly winds shift the spits of sand, and often even choak up the entrance of the pond, which usually opens again by the next southern blast. In this pond are prodigious numbers of seals, and some flat-fish, eels, &c., and, on the south-west side, lies a bed of remarkable large muscles and clams. The south shore is, between the cliffs, so low, that the sea breaks quite over in many places, when the wind blows on the island. The *Ram's Head* is the highest hill on this island; it has a steep cliff on the north-west, and falls gently to the south-east. The *Naked Sand-hills* are 146 feet in perpendicular height, above the level of high-water mark, and always appear very white. *Mount Knight* is in the shape of a pyramid, situate in a hollow between two steep cliffs. *Mount Luttrell* is a remarkable hummock on the top of a large swelling in the land. *Gratia Hill* is a knob at the

the top of a cliff, the height of which is 126 feet perpendicular, above high-water mark. The *Vale of Misery* is also remarkable, as is *Smith's Flag-staff*, a large hill, with a regular ascent every way. From the offing, the south side of the island appears like a long ridge of sandy cliffs, lessening towards the west end, which is very low.

The NOVA SCOTIA BANKS extend nearly 70 leagues, in a westerly direction. From the Isle of Sable, they are from 20 to 25 leagues wide, and their inner edges are from 14 to 18 leagues off shore. They are intersected by narrow winding channels (the bottom of which is mud), running N.W. and S.E. Between these banks and the shore are several small inner banks, with deep water and muddy bottom. The water deepens regularly from the Isle of Sable, to the distance of 22 leagues, in 50 fathoms, fine gravel; thence proceeding westward, the gravel becomes coarser: continuing westward to the western extremity of the banks, the soundings are rocky, and shoalen to 18 and 15 fathoms water: Cape Sable bearing N. by W. distant 15 leagues.

The south-west extremity of *Banquereau*, or *Bank Quero*, lies 17 leagues E.N. E. $\frac{1}{2}$ E. from the east end of the Isle of Sable. This bank extends E. by N. 35 leagues, and is nearly 8 leagues in width; its shoalest part is about 5 leagues from its eastern extremity, in 16 and 18 fathoms water, slimy sand and clams: whence it deepens regularly every way to 60 and 70 fathoms, towards the edges of the bank.

This bank is steep-to; and, from its soundings on the north side, you fall immediately into 90 or 100 fathoms water, black mud; and, on the south side, into 120 fathoms.

The COAST of NOVA SCOTIA.

It may be observed, generally, that the soundings all along the Nova Scotia Coast, between Cape Canso on the E.N.E., and Cape Sable, to the W.S.W., are very irregular; from 25 to 40 and 50 fathoms. In foggy weather, do not stand nearer in-shore than 35 fathoms, lest you fall upon some of the ledges. By no means make too bold with the shore in such weather, unless you are sure of the part of the coast you are on; for you may, otherwise, when bound for Halifax, fall unexpectedly into Mecklenburg Bay, and thus be caught with a S.E. wind.

At the entrance of the harbours and rivers on the coast, salmon is taken from April until August; and, from one to two or three leagues out to sea, cod, halibut, haddock, rays, and mackerel. Herrings are taken in the bays and harbours, in the months of June and July; and tom-cod all the year round.

The weather on the coast is frequently foggy in the spring and some part of the summer; in particular at the distance of 4 or 5 leagues from the shore. On approaching nearer, the weather is found more clear; and, with the wind from the land, it is perfectly clear and pleasant.

From Cape Canso, or the eastern ledges, to Cape Jarvis, at the entrance of Egmont Harbour, or abreast the Jedore Ledges, the coast is bordered all along with numerous isles, rocks, &c., and broken into bays, rivers, inlets, &c.; but, between Cape Jarvis and Devil's Island, the coast is clear of rock, and has two or three red cliffs, (at the entrance of Five Fathom Harbour and Musquodabit River,) which are remarkable, as no such land is elsewhere to be found along the S.E. coast: you may stand in towards this shore to 8, 6, and 5, fathoms, gradual soundings, without danger.

Between Cape Canso and Cape Sable, and all round the Isle of Cape Breton, the tides flow nearly between 8 and 9 o'clock, and rise from 4 to 6 feet at neap

* We have been recently informed that a man, with his family, lately went to settle on this island, with stores and provisions for the relief of shipwrecked seamen, &c. There is a boat on the island, and poles, with notes upon them, to describe where the boat lies, and where the house stands. (May 1809.)

tides

tides, and from 6 to 8 at spring tides. A S.S.W. wind, when it blows hard, makes the highest tides on this coast. All along the S.E. coast, the tides are very easy, from $1\frac{1}{2}$ to 2 miles per hour: in narrow channels it sets something stronger. The currents in general change according to the change and strength of the winds.

The variation of the compass on the Nova Scotia coast is in general *one and a half point west*, and in some places more; at Louisburg it has been observed to extend to 20 degrees west.

Between Cape Canso and Halifax there are several harbours capable of receiving ships of the third rate; viz. Country Harbour, Liscombe Harbour, Port Palliser, &c. The first of these has been surveyed by Mr. Backhouse, whose directions for it are as follow.

COUNTRY HARBOUR is safe and commodious; its entrance is between the Fiddle and Bassoon Rocks, leaving Williams's Island on the starboard hand, and Orpheus Ledges on the larboard; give them a berth, by your lead, from 9 to 7 fathoms; when past Orpheus Ledge, (which extends more to the northward than as some charts exhibit them,) keep the west shore on board. Although the entrance of the harbour is but narrow, there is no danger but on the East point, where a small rock lies, with 3 fathoms on it, which extends from the point about 25 fathoms. When past this rock, both shores are bold to; you may run up as high as Captain Leggit's house, and come to, in 7 fathoms muddy bottom, and there wood and water at Cochrane's Cove. This harbour would contain all the British navy, if chain-moorings were laid down to ride by. The depth of water going in is from 6 to 10 fathoms, muddy bottom.

Between the east point and Hinchinbrook Harbour, the ground is all foul and rocky. (See the Chart of the Harbour).

Description of the LAND near HALIFAX HARBOUR.

THE land about the harbour of Halifax, and a little to the southward of it, is, in appearance, rugged and rocky, and has on it, in several places, scribbly withered wood. Although it seems bold, yet it is not high, being only to be seen from the quarter-deck of a 74-gun ship, at 7 leagues distance; excepting, however, the high lands of Le Have and Aspotagoen, which are to be seen 9 leagues off. The first, which is 12 leagues W.S.W. from Cape Sambre', appears over Cape Le Have, and like little round hills of unequal height. Aspotagoen, when bearing N.W. by N., appears directly over Queen Charlotte Bay, about 5 leagues westward from Cape Sambre': it is rather a long high land, nearly level at top, and rising above the land near it. It may be seen, in clear weather, at the distance of 6 leagues. When bearing North, distant between 5 and 6 leagues, Sambre' Lighthouse will bear about E. N.E. distant 7 leagues.

The lighthouse on Sambre' Island is remarkable; it being a high tower on that island, which is small and rocky, lying at a little distance to the S.W. from Chebucto Head, on the S.W. side of the entrance into Halifax Harbour.* Chebucto Head has a remarkable rocky and barren appearance.

♦ The lighthouse at the entrance of Shelburne, which lies 30 leagues to the W.S.W. by compass, from Cape Sambre', is distinguished from Sambre' lighthouse by its having a light at about one-third down from the top of the tower, in addition to that at the top.

The island and lighthouse, near the harbour of Halifax, lie in latitude 44 deg. 30 min. N. and longitude 63 deg. 31 min. west of Greenwich.

* The appearance of it is given on the Chart.

Instructions for SAILING into HALIFAX HARBOUR.

THE entrance of Halifax Harbour lies between the *Thrum Cap Shoals* and the *Lichfield Rock*: the former on the eastern, the latter on the western, side. On the extremity of each there is a buoy; the *Thrum Cap Shoals* having a red buoy on the S.W. end, and the *Lichfield Rock*, a white one, on its north end. A mile within the latter, to the northward, lies the *Mars Rock*, whose place is denoted by a buoy; and a mile above that, on the opposite side, is a dangerous shoal, called the *Horse Shoe*, extending from *Mauger's* or *Major's Beach*. Half-way between the latter and *George's Island* is a shoal, extending to the S.W. from *Point Pleasant*, nearly one-third of the channel over, but having, on its extremity, a white buoy: above or within this, on the same side, lies *Reid's Rock*, which is also marked out by a white buoy. Opposite lies a red buoy, on a spit which extends from the N.W. end of *Cornwallis Island*.

Between *Mauger's Beach* and *Point Pleasant Shoals* there is a middle ground, of 5 fathoms, marked out by a red buoy.

Without the entrance, and *Chebucto* (or *Jebucto*) Head, on the western side, lies a sunken rock, called the *Bell Rock*: to the S.W. of this lie the black rocks, called the *Eastern Ledge*; and, to the S.W. or S.W. by W. from *Sambro*, or the *Lighthouse Island*, lie two reefs called the *Western Ledges*.

The brief directions for entering the Harbour, as issued from the Custom-house, at Halifax, are as follow:

From the westward, bring the light to bear N.E.; if it bears more easterly, stretch to the southward till it bears N.E. (and as much more northerly as you please, there being no shoal or ledge to the southward), then keep it open on your larboard bow; give it more than a mile and a half berth; as much more as you please.

Note, the easternmost of the western ledges lies from the light S.W. distant 2 miles; the other W.S.W. about one league; the eastern ledges lie in a range nearly, some above water, the outermost one mile and a half from the light, bearing from it E.N.E.

When the light bears north, distant about two miles, run N.E. four miles, then north, will carry you to *Chebucto Head*; at a proper distance clear of all danger.

When abreast of *Chebucto Head*, run N. $\frac{1}{2}$ W. for the south point of *George's Island*.

When within half a mile of *George's Island*, you may enter the harbour west of it, in 12 fathoms, or east of it in 15 fathoms water.

In passing between *Sandwich Point* and *Mauger's* or *Major's Beach*, run rather nearest the point, to shun a shoal which runs off S.W. from the beach.

When coming from the eastward, run for the light, and you cannot fail seeing *Chebucto Head*, as you open Halifax Harbour, the light being four miles distant from the Head, to the south-west of it.

Note, These directions are agreeable to the common compass, varying 13 deg. westerly, at the time they were published. It is now one-quarter of a point greater, as hereafter noticed.

The following are the Directions for sailing into the Harbour, as given by Mr. Backhouse, in his *New Pilot for Nova Scotia, &c.*

IF SAILING into HALIFAX HARBOUR from the Westward, with a westerly wind, by night;—when you have made the lighthouse, at the distance of about two or three leagues, first steer E.N.E. or E. by N. until you are sure of being to the eastward of the extremity of the S.W. ledges, which bears from the lighthouse S.W. two miles distant. When past the S.W. ledges, steer E.N.E., or E. by N., until

* These objects, with all the others here noticed, are clearly exhibited on the Chart of Halifax Harbour, by Mr. Backhouse; to which the reader is referred.

DIRECTIONS FOR HALIFAX HARBOUR.

the lighthouse bears North; then N. E. by E. or N. E. ~~th~~ it bears N. W.—then N. E. by N. or N. N. E. until it bears W. N. W.—then haul up North or N. by E. (according to the wind) for Chebucto Head, which is bold within half a mile from the shore, taking care to avoid the Bell Rock. Run in, steering north, along the west shore, steering directly for Sandwich Point, which is bold-to; and thus you will pass to the eastward of the Lichfield Rock. When abreast of Sandwich Point, and approaching the fort on the same side, calculate your distance equally, from either side, and keep in mid-way between the point and Mauger's Beach, in order to avoid the *Horse-shoe* that stretches from the beach. When past the Horse-shoe, edge over towards Cornwallis Island, keeping in mid-channel between the island and Point Pleasant shoals, on which is a white buoy, as above mentioned. When past the Spit, that lies to the north of Cornwallis Island, steer North for George's Island, of which you may go on either side, and run up to abreast the town of Halifax, about the distance of 2 cables' length to the eastward of the mooring-buoys, and come to anchor in 9 or 10 fathoms, muddy bottom, or so near to the wharfs that your hawser will reach the shore.

If Sailing into Halifax Harbour, from the Eastward, with an easterly wind; observe, that the Thrum-Cap Shoals must be carefully avoided.* A red buoy lies on the extremity, as above mentioned; and the thwart mark to clear it is, the easternmost land kept in sight from the deck, a ship's length clear to the southward of Devil's or Rous's Island, and bearing about E. N. E. or E. by N. steering West or W. by S. according to your distance from the island.

Now steer West, W. N. W., or N. W., according to the wind and your distance from the shoals, until George's Island, up the harbour, is open a sail's breadth to the westward of Cornwallis Island; then haul up for Sandwich Point and the fort, until you see the steeple of St. Paul's Church, in Halifax, a ship's length open to the eastward of Judge Brenton's House, a remarkable one, fronting the south†. This mark, kept on, will lead clear of Point Pleasant shoals, and in a fair-way between Mauger's Beach and Sandwich Point; whence you may steer directly for George's Island, and pass it on the east side, if the wind will permit.

The marks for the Lichfield Rock are, George's Island open to the eastward of Sandwich Point, and the passage between the Devil's Island and the main kept open, bearing E. N. E. This rock has only 16 feet over it, at low water.

The long leading-mark, for running up in a fair-way, N. and N. $\frac{1}{2}$ W. from abreast of Chebucto Head (so soon as you can discover the three hills a little above the village of Dartmouth, at the head of the harbour), is, to keep the middle hill above Dartmouth (with some naked trees on it) in a line over the N. W. end of George's Island. This will lead clear of the flat that runs to the S. S. W. from Mauger's Beach, and likewise clear of Point Pleasant shoals, with the spit that stretches from the N. W. end of Cornwallis Island, and directly up to George's Island. It also leads over the Middle Ground; through 5 to 8 fathoms, rocky bottom.

The Middle Ground extends N. and S. for one cable's length, and is about 30 fathoms broad: as you fall off to the eastward of it, you will have 7, 10, 13, to 16, fathoms, muddy bottom. To the westward of this Ground may be found 10, 12, and 14, fathoms, coarse and rocky bottom.

In turning to windward, give the upper or inner part of Mauger's Beach a berth of one cable's length, in order to avoid the Horse-shoe spit, that runs from the north part of the beach to the distance of one cable and a half's length. You may stand to the Sandwich Point side to within two ships' length, that being bold-to; but stand no farther over to the westward, to avoid Point Pleasant shoals, than keeping St.

* Want of necessary caution, in this respect, occasioned the melancholy loss of his Majesty's ship Tribune, with 250 brave seamen; the wreck of which lies to the N. W. of the Lichfield Rock.

† These and the other marks are shewn in the Chart of the Harbour, by Mr. Backhouse.

Paul's Church open to the eastward of Judge Brenton's house, on the south shore, as above mentioned.

The thwart mark for Point Pleasant Buoy is a little islet, (on the west shore, at the entrance of the N.W. arm,) with a remarkable stone upon the hill, appearing like a coach-box, and bearing W.S.W.

When arrived thus far, put in stays; and, standing to the eastward, keep Little Thrum Cap Island, a red bluff, open of Cornwallis Island; having this mark on, put in stays again, and you will thus go clear of the N.W. spit of Cornwallis Island.

Reid's Rock, before mentioned, lies half way between Point Pleasant and Judge Brenton's house. It has 12 feet over it. The marks above given for Point Pleasant shoals will lead clear of this rock. The thwart-mark is, a farm-house in the wood over a black rock on the shore, bearing W. by S.

The variation of the Compass, in Halifax Harbour, as observed by Mr. Backhouse, was 16 deg. 30 min. W. in 1798.

CATCH HARBOUR.—The Little Harbour, or Cove, called Catch Harbour, which lies to the westward of Chebucto Head, has a bar across the entrance, having 9 feet over it, at low water, with breakers when the wind blows on the shore. It is frequented by small vessels only.

COURSES and DISTANCES from different Points between HALIFAX and CAPE CANSO.

(BY MR. BACKHOUSE.)

From Sambro' Lighthouse, or abreast the Eastern Ledges, at the distance of 3 miles, to Cape Canso, at the same distance,—E. $\frac{1}{4}$ N. 39 leagues.

From Sambro' Lighthouse, as above, to Jedore Ledges,—E. 7 leagues.

From Jedore Ledges to abreast of Bever's Island,—E. $\frac{1}{4}$ N. 8 leagues.

From Bever's Island to White Island,—E. by N. $3\frac{1}{2}$ leagues.

From White Island to abreast of Taurus's Rock under water, or abreast of Liscomb Harbour,—E. by S. 8 miles.

From abreast of Liscomb Harbour to the Fiddle Rocks, or abreast of Country Harbour,—E. $\frac{1}{4}$ S. and E. by S. 5 leagues.

From the Fiddle Rock to the Bassoon Rock,—E.N.E. $2\frac{1}{2}$ miles.

From the Bassoon Rock, or opposite Green Island, to abreast of White Head,—E. by S. to E.S.E. $7\frac{1}{2}$ leagues.

From White Head to Cape Canso, or abreast of the Roaring Bull Rock,—E. by S., E. by N. to E.N.E. $4\frac{1}{2}$ leagues.

From the Roaring Bull Rock, bearing N.W., to abreast of Man of War Rock, at half a cable's distance towards Pettypashead,—N.N.W. 3 miles.

From the east end of Roaring Bull Rock, through between Man of War Rock and Mercury Rock, towards the west shore, first W.N.W., then N.W., and N.N.W.; through between Binny and Buckey Island, and past the Bald Rock into Chedabucto Bay,—W.N.W. 1 mile; N.W. 1 mile; and N.N.W. $2\frac{1}{2}$ miles.

From the Bald Rock to across Chedabucto Bay to Cape Argus,—N.W. and N.W. by N. 5 leagues.

N.B. To go round the Eastern Ledges, from abreast the Roaring Bull Rock, steer E.N.E. two miles, then N.E. by E. one mile and a half, then N.E. one mile, then N.N.E. one mile, then N. and N.N.W. two miles more, until you see the S.W. land (on the S. side of Chedabucto Bay) open to the northward of Bald Rock, then haul up W.N.W. for the middle of the Bay, whose sides are bold to,—E.N.E. 2 miles; N. E. by E. $1\frac{1}{2}$ mile; N.E. 1 mile; N. &c.; N.N.W.; W.N.W. 2 miles.

SAMBRO'

SAMBRO' ISLAND, near the Entrance of HALIFAX HARBOUR to CAPE SABLE.

GENERAL REMARKS.

From Halifax, westward, to Charlotte Bay, the country appears from the offing very rocky and broken; the shore is steep-to, and bounded with white rocky cliffs. The high-lands of Aspotagoen, on the east side of Mecklenburg Bay, are very remarkable; whence, proceeding westward, the rocks which surround the shore are black, with some banks of red earth. Between Cape Le Have (which is a remarkable promontory, bald on the top, with a red bank under it, facing the south-westward) and Port Jackson, there are some hummocks within land, about which the country appears low and level from the sea; and, on the shore, white rocks and stony beaches, with several low bald points; hence to Port Roseway, or Shelburne, the land is woody. About the entrance of Port Haldimand, and within land, are several barren spots, which from the offing are easily discerned; thence to Cape Sable the land appears level and low, and on the shore are some cliffs of exceedingly white sand, particularly in the entrance of Port Haldimand, and on Cape Sable, where they are very conspicuous from sea.

*Magnetic Bearings and Distances of Places between Halifax and Cape Sable, &c.**

From Sambro' Lighthouse, or two miles abreast the Sound of the S.W. Ledges, to abreast of Cape Sable, the S. W. end of Nova Scotia,—W. S. W. $\frac{1}{2}$ W. 36 leagues.

From the S.W. ledges to Prince of Wales's Island, at the entrance of Lunenburg Harbour,—W. by N. and W. N. W. $9\frac{1}{2}$ leagues.

From Sambro' Lighthouse to the Rock of Le Have, which is dry at low water,—W. S. W. and W. by S. 12 leagues.

From Le Have Rock to William's or Coffin's Island, or Liverpool Bay,—W. S. W. $7\frac{1}{2}$ leagues.

From William's Island, or abreast of Liverpool Bay, to Little Hope Island, a low flat isle, full of stones,—S. W. by W. $4\frac{1}{2}$ leagues.

From Little Hope Island to the eastern ledges of the Ragged Island Rocks,—W. S. W. 6 leagues.

From the Ragged Island Rocks to abreast of Cape Roseway or Shelburne Lighthouse,—W. $\frac{1}{2}$ N. 7 miles.

From Shelburne Lighthouse to abreast of Cape Negro,—S. W. $\frac{1}{2}$ S. 3 leagues.

From Shelburne Lighthouse to the Brazil Rock,—S. W. by S. 6 leagues.

From the Ragged Island Rocks to the Brazil Rock,—S. W. and S. W. by W. 4 leagues.

From the Brazil Rock to Seal Island Rock,—W. by N. 9 leagues.

From the Brazil Rock to Cape Negro,—N. E. by N. 3 leagues.

From Seal Island Rock to the Lurcher Rock, at the entrance of the Bay of Fundy,—W. N. W. 14 leagues.

DESCRIPTION AND DIRECTIONS.

SAMBRO' HARBOUR. The harbour of Sambro' lies about one mile and a half to the westward of the Lighthouse Island. Its best entrance, for vessels from the

* These bearings and distances are given as determined by Mr. Backhouse.

westward

westward, is between Cape Palliser and the *Bull Rock*; but those from the eastward may run up between Sambro' Island and the *Inner Ledge*. In the anchorage, which is within the *Isle of Man*, there are 3 fathoms water, muddy bottom. The *Gut* or strait, which connects this harbour with *Londy Bason*, is very narrow, and has a depth of 2 and 3 fathoms.

BRISTOL BAY and SHULDHAM HARBOUR.—Bristol Bay is about 3 miles in breadth. Vessels proceeding hence for the anchorage in Shuldham Harbour, to the N.W., when coming from the westward, should first bring Point Mackworth to bear North, and pass between the *White Rocks* and the rocks which lie off that Point. Between Cape Palliser and Harvey Isle there is, also, a safe channel, with good ground in 7 and 8 fathoms. The tide flows here, on full and change days, at three quarters past seven, and rises about 8 feet.

PROSPECT HARBOUR.—This harbour lies about two miles and three quarters to the northward of Cape Prospect. In its entrance the soundings are irregular. There is a breaker, with 3 fathoms over it, at the distance of two cables' length to the east of Dorman Rock. There is good anchorage for the largest ships above Pyramid Isle; and for small vessels, in 4½ fathoms, within Betsey's Isles, where the bottom is of stiff blue clay.

LEITH HARBOUR lies about two miles to the north-westward of Prospect Harbour. In its entrance lies the *Hog*, a sunken rock, having only 6 feet water over it. This rock bears E.S.E. nearly 1½ mile from the isle called Inch-keith. In rough weather, with the wind on shore, the sea breaks over it; and, in fair weather, it may be perceived by the rippling of the tide. There is a good channel on either side. That on the west side is most difficult, there being a ledge extending half a mile towards it, E.S.E. from the eastern extremity of Inch-keith.

PORT DURHAM, which lies to the westward of Inch-keith, between it and Hercules Isle, has a good depth of water, though its entrances be narrow. In sailing in through the eastern one, give a berth to the reef which extends E.S.E. half a mile from Inch-keith.

CHARLOTTE BAY.—The southernmost point of Holderness Island, which is the south-west point of the entrance of Charlotte Bay, lies in 44 deg. 34 min. 25 sec. N. latitude, and 63 deg. 55 min. 30 sec. W. longitude from Greenwich. In this bay are several harbours fit to receive first-rate ships. The high-lands of Aspotogoon are very remarkable at a considerable distance: in the offing, the shores on the entrance are high white rocks, and steep-to: off the west side coming in, you perceive the *Dog*, (a ledge almost covered and surrounded with breakers,) which lies S. by E. 3 deg. E. true, (or South by compass,) nearly 1½ mile distant from the south end of Holderness Island, and W. 3 deg. South, true (or W. by N. by compass,) from the southernmost point of Inch-keith. You have good channels on both sides of the small island, which shelters the S.W. harbour.

In *Fitzroy River*, Charlotte Bay, ships may lie land-locked, in 5 or 6 fathoms. When sailing into it, you must carefully avoid the danger called *Black Ledge*, which lies about S.W. by W. 300 fathoms from *Warren Head*, and appears at all times of the tide. It has deep water close to it. In *Delaware River* and *Conway Cove*, the largest ships may also ride in perfect safety. When sailing into the latter, keep nearest to the starboard side of the entrance. On the eastern side of the bay, within *Hertford Bason*, there are from 8 to 10 fathoms. There is commodious shelter within Mecklenburg Isle; and farther up, within the *Strelitz Isles*, there is, likewise, good anchorage.

About 5 miles S. ½ W. from the point of land which separates Charlotte and King's Bays lies **GREEN ISLAND**. It is small, and lies 7 leagues W.N.W. ½ W. from abreast of Sambro' lighthouse, in latitude 44 deg. 37 min. 35 sec. N. and 63 deg. 58 min. 30 sec. West longitude from Greenwich.

KING'S BAY is divided from Charlotte Bay by the peninsula, on which stand the high lands of Aspotagoen, before mentioned, whose appearance, in three regular swellings, is very remarkable at a great distance in the offing. Between the many islands in this bay, are several good channels, leading up into fine harbours. The outer breaker lies N.E. $\frac{1}{4}$ E. one mile and two-thirds distant from the S.E. end of Duck Island, and W. $\frac{1}{4}$ N. $3\frac{1}{2}$ miles distant from the N.W. point of Green Island; from this, about $2\frac{1}{2}$ miles N. by W., lies the **BULL**, (a blind rock, visible at three-quarters ebb,) bearing W. by S. 1200 fathoms distant from the S.W. end of Flat Island, and S. by E. above two miles distant from the west point of Royal George Island. Farther up, N.W. by W., 400 fathoms distant from West Point, lies *Rocky Shoal*; within which and Royal George Island is deep water. The *Coachman* is a blind ledge within Mecklenburg Bay, visible at low water only. The east end of Royal George and Flat Islands in one, will lead you clear on the east side of it. The west end of Iron-bound Island, open with the west point of Little Tanook Island, will clear you on the south side; and Governor's Island on with West Point, carries you safe on its north side.

MECKLENBURG BAY.—This Bay is full of the finest harbours; and there are deep passages within almost every island in it, with anchorage for shipping of every description. The bearing and distance from Cape Palliser to Royal George Island, which lies at the entrance, are W.N.W. $\frac{1}{4}$ W. 7 leagues.

If coming from the southward into *Prince Harbour*, which lies to the S.W. of the bay, when you have advanced up to Royal George Island, steer for Robinson's Rock, which is always above water, until the north point of Louisa Island is open from the north end of William Henry Island. Hence you may steer to any part of the harbour, and anchor at pleasure in from 9 to 4 fathoms, good ground.

LUNENBURG or MALAGASH BAY.—The channels into this Bay, on either side of Prince of Wales's Island, are safe; but that to the westward of the island is the best. In sailing through the northern channel, be careful to avoid the shoals which extend from the north side of the island, and from Colesworth Point on the opposite side. In sailing in, through the channel to the westward of the island, steer in a midway between it and Rose Point; and, before you approach Ovens Point*, give it a berth of two or three cables' length; for, from Ovens Point to the S.E. runs off a spit, to which you must not approach nearer than 7 fathoms. From Ovens Point, N.E. three-quarters of a mile distant, lies the Cat Rock, dry at low water. Your leading-mark between Ovens Point and the Cat Rock, is a waggon road-way (above the town of Lunenburg) open to the westward of Battery Point, which mark will keep you clear of a rock of 4 fathoms at low water. The best anchoring ground is on the west shore, opposite the middle farm-house, in 7 fathoms, muddy bottom. Your course in, is from N.N.W. to N.W. by N. In this bay, with good ground-tackling, you may ride out a S.E. gale very safely. The harbour, which is to the northward of the Long Rock and Battery Point, is fit only for small ships of war and merchant-vessels.

The latitude of Prince of Wales's Island, according to the observations made by Mr. Backhouse, is 44 deg. 20 min.

PORT JACKSON.—Admiralty Head, at the entrance of Port Jackson, lies in latitude 44 deg. 10 min. 30 sec. and longitude 64 deg. 29 min. W. of Greenwich. The land to the eastward of this port is remarkably broken and hilly. The outer breaker on the starboard side, without the entrance S. $\frac{1}{4}$ W. above $1\frac{1}{2}$ mile from Glover Isle, and S.E. $\frac{1}{4}$ S. about $1\frac{1}{2}$ mile from Admiralty Point.

The course up the harbour is N.N.E., and when Collin's Isle (on the west shore) bears West, and Alicia River is just opening of Point Lucy, you may steer up N.W. by N. to anchor, keeping nearest to the eastern shore.

* See the Chart of this Harbour, by Mr. Backhouse.

To run up Alicia River, you must pass between Grass Isle and Point Lucy, keeping close to the southern and western shores, in order to avoid a flat which extends from the northward, leaving a deep and narrow channel. Barry Branch is full of rocky shoals.

LIVERPOOL BAY.—*Bald Point*, on the S.W. of the entrance of **LIVERPOOL BAY**, lies in latitude 44 deg. 4 min. 0 sec. and longitude 64 deg. 37 min.

This bay has room sufficient for turning to windward. The deepest water is on the western shore. *Bald Point*, at the entrance, is bold-to, and is remarkable, having no trees on it. *Schooner Cove*, on the north-east side of the bay, affords good shelter from sea winds, in 3 fathoms, muddy bottom. At high-water, vessels of two and three hundred tons may run up over the bar into the harbour; but, at low water, there are only 10 feet over it. The channel, within, winds with the southern shore, and the settlements of Liverpool upwards.

GAMBIER HARBOUR, or PORT MATOON.—The south point of *Matoon Island*, at the entrance of the harbour, lies in 43 deg. 57 min. 37 sec. N. latitude, and 64 deg. 42 min. 0 sec. W. longitude from Greenwich. On both sides of the *Portsmouth Rocks*, (which are always above water,) you have deep channels, and of sufficient width to turn into the harbour with a leading wind. Steer N.W. by N. until you bring *Saddle Island* to bear S.W. and then haul up S.W. by W. to the anchoring ground. Small vessels may pass on the west side of *Matoon Island*, between the *Bull* and the western shore.

PORT MANSFIELD.—*Point Herbert* lies in 43 deg. 51 min. 10 sec. N. latitude, and 64 deg. 51 min. 20 sec. W. longitude from Greenwich. *Green Island*, without the entrance, is remarkable from the westward, having no trees upon it. The channel leading to the anchoring ground, in 3 fathoms, is not more than 60 fathoms wide between *Bridge's Rock* and *Stony Beach*. Above are flats, with narrow winding channels through the mud.

PORT MILLS.—The entrance of this port has a very rugged appearance. Several ledges and breakers lie scattered before it. Those coming in from the eastward, after having passed *Thomas's Island*, which has high rocky cliffs on its east side, and sunken rocks extending to the S.W. nearly a mile from the southern point, should keep a good look-out for the *Tiger*, a dangerous breaker, lying South half a mile from *Rug Point*, which is to be left without. Then haul up N.W. by N. shaping your course along *Muffat Island*, so as to avoid a shoal which stretches half way over from the eastern side. In the best of the channel, *Centre Isle* is just open with *Muffat Isle*: and with this mark you may run up to the anchorage in the North Arm.

SHELBURNE, or PORT ROSEWAY HARBOUR.—*Cape Roseway*, the S.E. point of *Roseneath* or *Macnutt's Island*, is a high cliff of white rocks, the top of which is partly without wood. The west side of the island is low. On the Cape stands the noble lighthouse of *Shelburne*, which has a white and remarkable appearance in the day, and at night exhibits a small light below, at about one-third from the top, by which it is distinguished, at night, from the light of *Sambro*, or *Halifax*.

The latitude of this lighthouse, according to the determinations of Mr. Backhouse, in 1792, by the several means of double and meridian altitudes, is 43 deg. 42 min. 30 sec. The variation at the same time was 13 deg. 30 min. W. Of preceding observations, the results were, latitude 43 deg. 40 min. and longitude 65 deg. 13 min. West of Greenwich.

The directions for this Harbour, as given by Mr. Backhouse, are as follow. (See his Chart.)

When coming in from the ocean, after you have made the lighthouse, bring it to bear N.W. or N.W. by N. and steer directly for it. The dangers that lie on the

the east side, going in, are the Ragged Island Rocks, a long ledge that stretches out from the shore 6 or 7 miles, the Bell Rock, and the Straptub Rock. On the west side is the Jigg Rock. The Bell Rock is always visible, and bold-to.

When you have gotten abreast of the lighthouse, steer up in mid-channel; Macknutt's Island is pretty bold-to all the way from the lighthouse to the N.W. end of the island. When you come up half way between George's Point and Sandy Point, be careful of a sunken rock that runs off from that light, on which are only 3 fathoms at low water, keep the west shore on board to avoid it: your depth of water will be from 4, 5, to 6, fathoms.

SANDY POINT is pretty steep-to: run above this point about half a mile, and come to anchor in 6 fathoms muddy bottom; if you choose, you may sail up to the upper part of the harbour, and come to anchor in 5 fathoms muddy bottom, about one mile and a half from the town, below the harbour flat. This harbour would contain all His Majesty's ships of the third rate.

In sailing in from the eastward, be careful to avoid the Ragged Island Rocks, which are under water: do not haul up for the harbour till the lighthouse bears from you W. by N. $\frac{1}{2}$ N.: by that means you will avoid every danger, and proceed as taught above.

In sailing into Shelburne from the westward, do not haul up for the lighthouse till it bears from you N. by E. $\frac{1}{2}$ E. to avoid the Jigg Rock, which lies within one mile and a half of the lighthouse, and is pretty steep-to.

Should the wind take you a-head, and constrain you to ply to windward up the harbour, do not make too bold with the eastern shore; for, half way between George's Point and Sandy Point runs off sunken rocks. When you come abreast of them, do not stand above half-channel over, to avoid them; the Hussar frigate, in plying to windward down the harbour, had nearly touched on them. On the west shore, abreast of Sandy Point, it is flat, therefore do not make too bold in standing over.

The ledge of rocks that His Majesty's ship Adamant struck upon, which lies abreast of Dufrey's House, is to be carefully avoided: do not stand any farther over to the westward than four fathoms and a half, lest you come bounce upon the rock, as the Adamant did, and lay a whole tide before she floated, and that not without lightening the ship. The east shore has regular soundings from Sandy Point upwards, from 3 to 4 and 5 to 6 fathoms, to the upper part of the harbour, where you may ride safely in 5 fathoms, good holding ground. Your course up from the lighthouse, in a fair-way, is from N.W. to N.W. by N.; and when you round Sandy Point the course is thence N. by W. and N. as you have the wind. The entrance of Shelburne Harbour affords a refuge to ships with the wind off shore, which the entrance of Halifax does not, which is anchoring ground at the mouth of the harbour, when it blows too strong to ply to windward.

In sailing from the Westward for Shelburne, at night, you must not haul up for the harbour until the light bears N. by E. $\frac{1}{2}$ E. in order to avoid the Jigg Rock: and when sailing in, from the Eastward, you must not haul up for the harbour till the light bears W. by N. $\frac{1}{2}$ N. in order to avoid the ledges that lie off the Ragged Islands, and bear from the lighthouse E. $\frac{1}{2}$ S. eight miles distant. You may stop tide in the entrance of the harbour, in from 16 to 10 fathoms sandy, and some parts clay, bottom.

PORT AMHERST.—CAPE NEGRO ISLAND, at the entrance of Port Amherst, lies in 43 deg. 32 min. 5 sec. N. latitude, and 65 deg. 17 min. 50 sec. W. longitude from Greenwich. It divides the entrance into two passages; is very low about the middle, and appears like two islands. The Cape itself is remarkably high, rocky, and barren. Coming from the westward, in hauling round Point Jeffery, (to avoid the ledges, blind rocks, and shoals, extending easterly from the western shore,) shape your course N. E. by N. towards the Cape, giving the Savage Rocks a berth of three cables' length, until you open Davis's Isle (the westernmost and largest

isle at the head of the harbour) a sail's breadth with Point William; and run up in that direction, observing to keep clear of a sunken rock, which lies E.S.E. from Point William, about 300 fathoms from the shore. Fishery Beach is held to. To sail up through the east passage, keep Gray's Rock on board, and steer up N.W. for Point John, until you see across the isthmus in the middle of Cape Negro Island, and have passed the Budget, (a blind rock, which lies in a direction between the Whalesback and Gray's Rocks,) on both sides of which there is deep water; whence haul over to the westward, keeping along the shore of the island to avoid the shoal, which extends half the distance over from Point John towards the island. When you have opened the small rocks at the head of the bay, shape your course N. by W. to the anchoring ground.

PORT HALDIMAND, or PORT LA TOUR.—BACCARO POINT, at the entrance of this port, lies in 43 deg. 29 min. 55 sec. N. latitude, and 65 deg. 24 min. 25 sec. W. longitude from Greenwich. To sail into this port, coming from the westward, continue your course easterly, until you have Brehem Isle a ship's length open to the eastward of North Rocks; thence you may steer northerly for Isle George, and when you come up within the distance of two cables' length from its south end, haul to the westward, in a direction with the western extremity of Pond Beech, and open Prospect House, on the north side of the northernmost Mohawk Island, when haul into anchorage in 3 fathoms, mud bottom.

Nearly midway between Baccaro Point and the South Ledge lies the *Folly*, a sunken rock, which and the western shore is a channel of 6 fathoms. The *Vulture*, a dangerous breaker, lies W.S.W. nearly two miles from Baccaro Point.

BARRINGTON BAY.—The southernmost point of Cape Sable Island, without the entrance of this bay, lies in 43 deg. 26 min. 0 sec. N. latitude, and 65 deg. 34 min. 20 sec. W. longitude from Greenwich. There are extensive flats towards the head of this bay, and the channel, as you draw up, grows so narrow, that it requires a leading wind to wind through it to the anchoring-ground. The west passage, on the north side of Cape Sable Island, is used by small vessels only, and is not safe without a commanding breeze, on account of the tides setting immediately upon the rocks which lie scattered within it. Sailing through the Narrows, keep nearest the southern shore: then steer right out south-west, until Green Island opens with Point Lawrence, whence shape your course more southerly, in order to clear the Hazards on the north shore.

The BRAZIL ROCK.—This is a very dangerous rock, being dry at low water. Its dimensions are nearly equal to half a square acre of land, and it breaks very high in tempestuous weather. There are full 30 fathoms all around it. From Cape Negro the bearing and distance to the rock are, S.W. by S. 9 miles.

CAPE SABLE is a low woody island, at the south-eastern extremity of a range of sand-cliffs, and lies in 43 deg. 26 min. 0 sec. N. latitude, and 65 deg. 34 min. 30 sec. W. longitude from Greenwich. It is very remarkable at a considerable distance in the offing, the top of which is 120 feet above the level of high-water mark. A spit runs out southerly with breakers, from the westernmost sand-cliff. Here the tide runs at the rate of three, and sometimes four, knots; and, when the wind blows fresh, a rippling extends from the breakers southerly, to the distance of nearly three leagues, and shifts its direction with the tide; with the flood it is more westerly, and inclines to the eastward with the ebb. This ripple may be dangerous to pass through in a gale, as it has all the appearance of high breakers, although there is no less than 8, 10, 12, and 20, fathoms water, rocky ground. N.E. $3\frac{1}{2}$ miles distant from Cape Sable, are two sand-cliffs, remarkable from the eastward. At the Cape the tide, on full and change days, flows at eight hours, and rises 9 feet.

CAPE SABLE to the BAY of FUNDY and CHIGNECTO BAY.

In sailing from Cape Sable, up the Bay of Fundy, you will pass the *Seal Isles* and *Tusket Bald Isles*, the latter of which are small green isles, with red banks of earth. The shore between these and Cape St. Mary is chiefly surrounded with banks of red earth, and the country within appears even and well clothed with wood.

The coast from the south part of Long Island to the Gut of Annapolis, is nearly straight; the shore is bound with high rocky cliffs, above which is a range of hills that rise to a considerable height; their tops appear smooth and unbroken, except near the Grand Passage, Petit Passage, Sandy Cove, and Gulliver's Hole, where those hills sink in vallies. From the Gut of Annapolis up the Bay to Cape Split, the coast continues straight, and nearly in the same direction, with few rocky cliffs near the Gut, and many banks of red earth under high lands, which appear very even. In the Gut, leading into the Bason of Mines, from Cape Split to Cape Blowmedown, and from Cape Dore, on the north side, to Partridge Island, the land rises almost perpendicular from the shore, to a very great height. Between Cape Blowmedown and Partridge Island, there is a great depth of water, and the stream of the current, even at the time of neap-tides, does not run less than 5 or 6 fathoms.

Cape Dore and Cape Chignecto are high lands, with very steep cliffs of rocks and red earth, and deep water close under them. You have nearly the same kind of shore to the head of Chignecto Bay, where very extensive flats of mud and quick-sand are left dry at low water. The tides come in a *bore*, and rush in with great rapidity; they are known to flow, at the equinoxes, from 60 to 70 feet perpendicular.

The Isle Haute, or Hauto, is remarkable for the great height and steepness of the rocky cliffs, which seem to overhang on the west side.

GENERAL REMARKS.

Ships bound up the Bay of Fundy, to St. John's or Annapolis Royal, should take a pilot at Halifax, as the tides in this bay are very rapid, and there is no anchoring ground until you reach Harbour Delute, or Le Tung, or Mahogenes Bay. In the bay the weather is frequently very foggy, and the S. E. gales blow with great violence for twelve or fourteen hours, then shift to the N. W., and as suddenly blow as violently from the opposite quarter.

SEAL ISLES, at the entrance of the Bay of Fundy.—The southernmost point of the southern Seal Isles lies in 43 deg. 25 min. 25 sec. N. latitude, and 66 deg. 0 min. 35 sec. W. longitude from Greenwich, and bears from Cape Sable nearly W. N. W. $\frac{1}{4}$ W. $6\frac{1}{2}$ leagues: between them there are 17 fathoms water. About $3\frac{1}{2}$ miles S. $\frac{1}{4}$ E. from the S. W. part of the south Seal Isle, and W. by N. $\frac{1}{4}$ N. $6\frac{1}{2}$ leagues from Cape Sable, there is a rock above water, which appears to be very smooth. Between this rock and the south Seal Islands, there are 9 fathoms water. Off the west side of the island, there are two small rocky islands: between them and the Seal Islands, there are 2 and 3 fathoms water, but no safe passage.

Between the Seal Islands, there is a channel, about $2\frac{1}{2}$ miles wide, with 15 fathoms water in it. In going through this channel, you should keep nearer to the south than to the north island, because there is a shoal lies off about three-quarters of a mile from the north island, on which there are 3 fathoms at low water. The course through this channel is about N. W.

GANNET ROCK, a part of which is dry at low water, lies W. by N. $\frac{1}{4}$ N. between 4 and 5 miles distant from the south-westernmost of the Tusket Isles, on the S. E.

S. E.
9 mi
part
Abou
south
Fore
south
twee

C.
30 se
and
blind
south
runn
ther
close
caste
them

T
12 m
24 m
chu

T
lies
Fore
south
from
18 f
alon
fath

B
shor
north
Mid
fath
mud
narr
vesse
wind

G
from
The
and
the

A
ther
the v
Pass
from
the v
Gren
chan

T
20 to

S.E. shore of the Bay of Fundy, in latitude 43 deg. 40 min. 40 sec. N. and 66 deg. 9 min. 45 sec. W. longitude from Greenwich; and 14 miles N. $\frac{1}{4}$ W. from the S.W. part of the south Seal Island; and 9 miles S. by W. $\frac{1}{4}$ W. from Cape Forchu. About 4 miles W. by N. from the Gannet Rock, 14 miles N.N.W. $\frac{1}{4}$ W. from the south-west part of the south Seal Island, and 11 miles S.W. $\frac{1}{4}$ S. from Cape Forchu, there is a ledge of rocks, which appear about half-ebb. Between the south Seal Island and the Gannet Rock, there are from 8 to 20 fathoms water; between the Gannet and Cape Forchu, there are 23, 28, 16, and 14, fathoms.

CAPE FORCHU lies in 43 deg. 51 min. 30 sec. N. latitude, and 60 deg. 10 min. 30 sec. W. longitude from Greenwich: is very remarkable, being rocky, barren, and high. S. by W. $\frac{1}{4}$ W. off the entrance of the harbour, lies the Bagshot (a blind rock, which is dry at low water, and runs shoal near half a mile to the southward). In sailing into the harbour, you may pass on either side of it, and running up W.N.W. as you approach the Narrows, keep close to the west shore, there being a sunken rock nearly midway in the channel. There are two more close together, as you haul around the beach to the eastward (one of these, the easternmost), appears at low water. The best channel is to the northward of them.

The LURCHER, a sunken ledge, lies 19 miles N.N.W. from the Gannet Rock, 12 miles N.W. $\frac{1}{4}$ W. from Cape Forchu, 18 miles S.W. from Cape St. Mary, and 24 miles S.S.W. $\frac{1}{4}$ W. from the south point of Bryer's Island. Between Cape Forchu and the Lurcher, there are 28, 38, and 14, fathoms water.

TRINITY LEDGE consists of three stones, which are left dry at low water: it lies 5 miles N.E. by E. from the Lurcher Ledge, 12 miles N.N.W. $\frac{1}{4}$ W. from Cape Forchu, 12 miles S.W. $\frac{1}{4}$ W. from Cape St. Mary, and 18 miles S.S.W. from the south point of Bryer's Island. Between Cape Forchu and Trinity Ledge, there are from 12 to 24 fathoms water; between the Ledge and Cape St. Mary, there are 18 fathoms; between the former and Bryer's Island, there are 42 fathoms; and along the shore, between Cape Forchu and Cape St. Mary, there are 11 and 12 fathoms.

BAY of ST. MARY.—From Cape St. Mary upwards into the Bay, the south shore is low, and runs out in sandy flats, for near three-quarters of a mile. The north shore is surrounded by high steep cliffs, with deep water close under them. Mid-channel, and about two-thirds up the bay, lies a rocky bank, with 4 and 4 $\frac{1}{2}$ fathoms of water; and on each side of which are channels of 12 and 15 fathoms, muddy bottom. The entrance of the River Sissibou is shoal, and within has a narrow channel of 2 fathoms water. Opposite to Sissibou, lies Sandy Cove, where vessels, when it blows hard, may ground safely on mud, and be sheltered from all winds.

Grand Passage.—The south entrance of this passage lies 9 miles, nearly North from the south part of Cape St. Mary: between are from 14 to 30, and 22, fathoms. The grand passage lies between Bryer's Island and the S.W. end of Long Island; and the Petit Passage lies at the N.E. end of Long Island, about 8 miles distant from the Grand Passage.

About 2 miles S.W. from the south-west part of Bryer's Island, lies *Black Rock*; there are 16 fathoms water between Black Rock and the S.W. point of the island; the water is shoal. About 3 miles N.W. $\frac{1}{4}$ W. from the north entrance of the Grand Passage, is the *N.W. Ledge*. The widest and deepest channels for ships that come from the southward, for the Bay of Fundy, is between the north-west Ledge and the west Seal Isles: it is nearly 6 leagues wide. There is also a channel between Great Manan Island and the point of the main land to the westward of it. This channel is about 4 miles wide.

The *Petit Passage* is about 280 fathoms wide in its narrowest part, and has from 20 to 30 fathoms of water: its shores are bold-to. On the western side, near the northern

northern entrance, lies *Eddy Cove*, a convenient place for vessels to anchor in out of the stream of the tide, which runs so rapidly that, without a fresh leading wind, no ship can stem it.

ANNAPOLIS ROYAL.—The gut leading into the bason of Annapolis Royal, lies in 44 deg. 45 min. 30 sec. N. latitude, and 65 deg. 46 min. 30 sec. W. longitude from Greenwich. The shore on both sides, without the Gut, is iron-bound for several leagues. From Petit Passage, there is a range of hills, rising gradually to a considerable height, to the entrance of the Gut, where it terminates by a steep fall. Here you have from 25 to 30 and 40 fathoms water, which, as you draw into the bason, shoalens quickly to 10, 8, and 6, fathoms, muddy bottom. The stream of ebb and flood sets through the Gut at the rate of five knots, and causes several whirlpools and eddies. The truest tide is on the eastern shore, which is so bold-to, that a ship might rub her bowsprit against the cliffs, and be in 10 fathoms water. Point Prim runs off shoal about 30 fathoms. Ships may anchor on the east side of the bason, or run up towards Goat Island; observing, when within the distance of half a mile from it, to stretch two-thirds of the way over to the larboard shore, until past the island, which is shoal all around: and thence to keep mid-channel up to the town.

CAPE CHIGNECTO lies N.E. by E. $\frac{1}{2}$ E. 18 leagues from the entrance or Gut of Annapolis. *Chignecto Bay*, to the N. E. of this Cape, is navigable up to *Cumberland*, *Petculiac*, &c. From Cape Chignecto to Cape Spencer the bearing and distance are W. $\frac{1}{2}$ N. 47 miles.

The HARBOUR or RIVER of ST. JOHN.—The entrance of this harbour lies N. $\frac{1}{2}$ W. $11\frac{1}{2}$ leagues from the entrance of Annapolis, and may be distinguished by a light-house, which stands on Partridge Island. The entrance into the river, 3 miles above the town of St. John, is over the **FALLS**, a narrow channel of 80 yards in breadth, and about 400 long. This passage being straight, and a ridge of rocks running across, whereon there is not above 17 feet of water, renders it insufficient to discharge the fresh water of that river. The common tides flowing here about 20 feet, at low water the waters of the river are about 12 feet higher than the water of the sea; and, at high-water, the water of the sea is about 5 feet higher than the waters of the river; so that, in every tide, there are two falls, one outward and one inward. The only time of passing this place is, when the water of the river is level with the water of the sea, which is twice in a tide; and this opportunity of passing continues not above ten minutes: at all other times it is impossible, or extremely dangerous.

After you have entered through this place, called the *Falls*, you enter into a gullet, which is about a quarter of a mile wide, and two miles long, winding in several courses, and having about 16 fathoms in the channel. Having passed this gullet, you enter a fine large bason, about one mile and a half wide, and 8 miles in length, entering into the main river of St. John.

It has been observed, by M. des Barres, that the river St. John has sufficient depth of water for large ships to the Falls, whence it continues navigable 80 miles up into the country for vessels of 100 tons. At Fort Frederic, opposite the town of St. John, common tides rise 18 feet perpendicular, and equinoctial spring tides 25 feet: above the Falls it seldom flows more than 4 feet. When the tide has risen 12 feet at the fort, the Falls are smooth; after which, during about twenty minutes, they are passable. At times of great frosts, which generally happen between the beginning of April and the middle of May, from the melting of the snow, the Falls are absolutely impassable to vessels bound up the river, as the tide does not rise to their level.

Point Maspeck, on the west side of the entrance, lies in latitude 45 deg. 18 min. and longitude 65 deg. 50 min. W. of Greenwich.

Directions for ST. JOHN'S HARBOUR and MAHOGENES BAY; by Mr. BACKHOUSE.

"When you have made Mahogenes Island, or Partridge Isle*, so as to be distinguished from the light-house on the latter, then make a signal for a pilot, and the intelligence from Partridge Island will immediately be communicated to the city of St. John, whence a pilot will join you. Should the wind be contrary, or any other obstruction meet you, to prevent your obtaining the harbour that tide, you may sail in between the S.W. end of Mahogenes Island and the Main, or between the N.E. end and the Main, and come to anchor in 4 or 5 fathoms at low water, mud and sandy bottom. Mark for the best anchoring ground is, to bring the three hills in the country to the N.E. in a line: in one over Rocky Point Island, and the house on Mahogenes Island to bear S.E. by S.

"Should the tide of ebb have taken place at the beacon, you must not (by any means) attempt to gain the harbour that tide, but wait the next half flood, to go over the bar, as both sides of the entrance of this harbour are nothing but sharp rocks, dry at low water, and the tide of ebb is so rapid in the spring, when the ice and snow is dissolving, that all the anchors on board will not hold the ship from driving: it flows, full and change, at twelve o'clock, and frequently rises 30 feet perpendicular.

"On the Nova Scotia side your soundings will be from 50, 60, 70, 80, to 95, fathoms: stones like beans, and coarse sand; and, as you draw to the northward, the quality of the ground will alter to a fine sand, and some small shells with black specks. Come no nearer than 50 fathoms, and as you edge off to the N.W. and W.N.W. you will fall off the bank, and have no soundings."

Farther Directions for Sailing into ST. JOHN'S HARBOUR; by the same.

"WHEN you have passed Mahogenes Island, edge in shore towards Rocky Point, until Mahogenes Point is in a line over the N.W. corner of Mahogenes Island; sailing in between Rocky Point and Partridge Island with these marks in one, will lead you in the best water over the bar, until you open Cape Spencer to the northward of the low point on Partridge Island, then starboard your helm, and edge towards Thompson's point, until the red store at the south end of St. John's is in a line over the beacon; keep them in one until you pass the beacon at the distance of a ship's breadth, then haul N.N.W. up the harbour, keeping the blockhouse, at the upper part of the harbour, open to the westward of the King's store, situate close to the water-side, which will lead you in mid-channel, up to the wharfs, where you may lie aground dry, at half-tide, and clean your ship's bottom, or lie afloat in the stream at single anchor, and a hawser fast to the posts of the wharfs on shore.—N.B. The tide of flood here is weak, but the ebb runs very rapidly all the way down, past Mahogenes Island.

TIDES.—Between Cape Sable, or the Brazil Rock, and St. Mary's Bay, the tide of ebb sets out along the shore to the S.E. ward, till it loses its strength at the Brazil Rock, and meets the ebb at right angles, coming along shore from the E.N.E. ward.

The spring tides in the Bay of Fundy rise to 30 feet perpendicular, and neap tides rise from 20 to 22 feet: they flow on full and change, at St. John's, Mahogenes Bay, Annapolis Royal, Harbour Delute, Le Tung, and Grandmannan Island, at 12 o'clock. The tides set nearly along the shores."

In Chignecto Bay the tide flows with great rapidity, as before mentioned, and at the equinoxes rises from 60 to 70 feet perpendicular. By means of

* These Directions should be compared with Mr. Backhouse's Chart of the Harbour.

these high tides, the Bason of Mines, and several fine rivers, which discharge themselves about the head of the Bay of Fundy, are rendered navigable. It is worthy of remark, that, at the same time, the Gulf of St. Lawrence tide, in *Bay Verte*, on the N.E. side of the isthmus, rises only 8 feet.

SECT. VI.

PASSAMAQUADY to CAPE ELIZABETH.

The COASTS of the UNITED STATES, from PASSAMAQUADY to CAPE COD, &c.

THE BAY of PASSAMAQUADY, with the Scodick River, and the River of St. Croix, divide the British American territory from that of the United States. The western side of the bay may be distinguished by a light-house on West Quaddy Head, which was erected, by order of Congress, in the year 1808.

Vessels from the southward, when bound up for this bay, should make for the western coast, or that of the American States, as it is the most clear, and the flood most favourable.

To the southward of the Bay lie the *Grand Manan* and other islands, without which are the three little isles called the *Western Seal Islands*. The latter lie S. by E. 5 miles from the south end of Grand Manan, and have numerous rocks in their vicinity, especially to the eastward, as shewn on the charts.

Seal Rocks.—At about half a mile from West Quaddy Head lie two remarkable rocks, called the *Seal-Rocks*, which at a distance resemble a ship. To the eastward of these there is a whirlpool. In passing here it is therefore requisite to give these objects a berth of half or three-quarters of a mile before you haul in.

There are three Passages into Passamaquady Bay; namely, the *Western Passage*, *Head-Harbour Passage*, and *La Tete*, or *Eastern Passage*. The first is that between the Isle of Campo Bello and the main land to the west. *Head-Harbour Passage* lies between Campo Bello and Deer Island; and the *Eastern Passage* is to the eastward and northward of both islands. The passages more generally used by British ships are the latter.

Off the N.E. end of Campo Bello is a remarkable large white rock, called the *White Horse*. At the same end of that island is *Head Harbour*, a place of easy access. The fine harbour, called *Harbour Delute*, lies on the western side of the island; and, at its S.W. end is *Snug Cove*, another good harbour, where there is a British Custom-House. *Moose Island*, on the opposite side, belongs to the United States, and British ships are not allowed to ride there above six hours at any one time.

The western side of Grand Manan is steep-to, and the stream of tide between it and the land to the westward runs at the rate of four knots an hour. The course and distance from the N.W. end of this island to the *Wolves* or *Wolf Islands* are, N.E. by N. 9 miles.

If bound into the Western Passage, give a berth to the Seal Rocks, as above mentioned. After passing them, steer to the westward, keeping nearest to the south shore, for two and a half or three miles, where you may come to anchor, in 4 or 5 fathoms, well sheltered, either by day or night. You must not proceed higher, as a rocky bar stretches across, which is dry at low water. Here a pilot may be obtained, on firing a gun and making the usual signal, who will take the ship to Snug Cove or Moose Island, whence another may be obtained for St. Andrews or the River Scodick.

Large

Large ships, bound into the Bay, should pass to the eastward of Campo Bello, steering nearly N.E. by E. towards the Wolves, which lie about 8 miles eastward from Campo Bello. So soon as the passage between Campo Bello and the White Horse bears W.N.W. steer for it, leaving the White Horse on your starboard side, and keeping Campo Bello nearest on board. You will now see Harbour De-lute, above mentioned, and will leave several islands on your starboard side, when you pass the White Horse. In sailing down you will open a large bay to the W.S.W. capable of containing 100 sail of the line.

Between the Wolves and the Island of Campo Bello there is a depth of from 60 to 100 fathoms. With the latter bearing S.S.E. or S.E. there is a depth of 19 and 20 fathoms, where ships may anchor securely from all winds. The course thence to Moose Island is W.S.W. 2 leagues.

If bound from Moose Island up the River Scodick, as you pass Bald Head, give it a berth of half a mile, as a ledge of rocks lies off it. Having passed this point, the course and distance to Oak Point, or Devil's Head, will be N.N.W. 9 leagues. The latter may be seen for 10 or 12 leagues.

The Town and Harbour of St. Andrew lie nearly N.N.W. 6 leagues from Moose Island, on the eastern side of the entrance of the Scodick. The town is a pleasant little place, and the harbour being good, many ships load timber here, which is generally much longer than that of Nova Scotia. The merchants of this town load timber also at other places; viz. at Oak Bay, on the Scodick, and at Rushabec, Degedequash, and Magadavick, on the N.E. side of Passamaquady Bay, all being excellent and very convenient harbours. In the Bay, in general, there are from 17 to 25 fathoms water.

Tides.—Common tides within the Western Passage rise about 20 feet. At Moose Island the tide flows at 11 o'clock, full and change; and runs, when strongest, between Moose Island and Marble Island, and between Deer Island and Campo Bello, nearly 5 miles an hour. In the Bay, the stream of tide is scarcely perceptible.

The COAST WESTWARD of PASSAMAQUADY.

THE most remarkable elevations of land between the Bay of Passamaquady and Cape Elizabeth are the *Skuttock Hills, Mount Desert Hills, and Hills of Penobscot*. The Skuttock Hills are five in number, and at a distance appear round; they lie to the N.N.E. of the Port of Gottsborough, and are readily distinguishable from any hills to the eastward. These hills may, in clear weather, be seen from a distance of 15 to 20 leagues. The Penobscot Hills may be seen from the N.W. to the N.N.W. over the Fox Islands. When within 4 or 5 leagues of the Mount Desert Hills, the Skuttock Hills will bear about N.N.E.

In sailing towards this coast, care must be taken to avoid the Mount Desert Rock, which lies 6 leagues to the southward of Mount Desert Island; observing, also, to make proper allowance for the tide, &c. At the Mount Desert Rock, the stream of flood divides to run westward and eastward. With the Skuttock Hills about N.N.E. and within 4 or 5 leagues of those of Mount Desert, the tide of flood sets E.N.E. and the ebb W.S.W.; but, at the distance of 9 or 10 leagues from the land, the current, in general, sets to the S.W. and more eastward. From the Mount Desert Rock to the Fox Islands, the flood-stream sets W.S.W. along shore, but it still runs up to the northward into Blue Hill Sound, Isle Haute Bay, &c.

MACHIAS BAY.—In coming in for this bay, from the eastward, you may observe three low islands, which lie to the south-westward of the Grand Manan, and 4 leagues S.E. from the entrance of Machias. Great caution must be observed, when passing them in the night. From these islands you may shape your course N.W. or bring the S.W. end of Grand Manan to bear E. by S. and steer W. by N. for Machias. You leave Cross Island on the larboard hand; and, having passed it, you may steer North: on this course you will have a large white rock on your larboard

board side; and, unless bound into Machias Harbour, you may haul to the westward. When you have advanced half a mile above this rock, bring a high round island, which is covered with trees, to bear North, when you may anchor in 4 or 5 fathoms, muddy bottom. This is called *Jones's Harbour*. If you mean to go up to Machias, keep on a North course, until you pass a high round island on your larboard hand, when you may steer W. S.W. or W. by S. for a point covered with birch-trees, and having a house on it. On the starboard hand, there are rocks and shoals. You may keep on the larboard after you pass this point, until the river opens to the northward, when you may run up to Cross River, and anchor in 5 fathoms.

MACHIAS to GOLDSBOROUGH.—The course and distance from Machias Bay to Goldsborough Harbour may be best ascertained by reference to the Charts. In proceeding between these places, you will pass numerous islands on the starboard hand, with many inlets and good harbours, but generally too intricate for strangers to attempt with safety.

The Skuttock Hills, before mentioned, form a good mark for Goldsborough, as they lie to the N.N.E. Hence, by bringing them in that direction, and steering on that course, you will, in approaching the harbour, see three islands, which lie in its mouth. The middle one, through the Eastern Passage, these are to be left on the larboard hand; the small island without, called the Little Manan, is of course to be left on the starboard hand. The latter, which is about a league from the land, has a few bushes on it. It is connected with the land by a bar, which dries with the ebb. Within the entrance the harbour is a mile wide, and you may anchor in from 4 to 6 fathoms, where you please.

MOUNT DESERT ISLAND.—The course and distances, when entering into the S.W. harbour of Mount Desert Island, are N.E. or N.E. by N. 5 leagues. On this course you will leave the two Duck Islands on the starboard side, and three other islands on the larboard. It is not safe for a stranger to run in during the night, as there is a great ledge, which is uncovered at half tide, about one mile from the harbour. This is to be left on the starboard hand. There is also a long ledge on the larboard side, which extends half a mile off: there is, however, a good turning channel between. The S.W. passage is not fit for a large vessel at low water; but, at high water, any one may enter, by keeping nearest to the starboard shore, when sailing in. This precaution is requisite, as there is, off the other side, a long point, which stretches about half a mile from shore, and off which there are only 6 or 7 feet at low water. Above this point the harbour is open, and you may steer N.W. or W. N.W. and anchor, when well up, in 5 or 6 fathoms, muddy bottom; where, with any wind, you will lie safely.

PENOBSCOT BAY.—If coming in from the south-westward, and being near White Head, be careful not to haul in for it until it bears N.E. as you will thus avoid a great ledge of rocks, lying nearly W. N.W. one mile from White Head. Within this ledge, at about a pistol-shot from shore, there is a safe passage. In passing the Head, to the eastward, you will see a good harbour on the larboard hand, called *Seal Harbour*, wherein you may lie safely in any wind. In going in, give the larboard shore a berth, to avoid a sunken rock extending about two-thirds over the mouth of the harbour, and breaking in any sea, except at high water.

From White Head to Ash Point, or Island, the course and distance are N.E. about one league. This island has a rock, about one mile to the S.W. of it, which must be left on the larboard hand. When hauled up to the island, give it a small berth, and steer N.N.E. or N.E. by N. for the Owl's Head, leaving two islands on the starboard side. Having advanced near the starboard shore, the course will be about E.N.E. for the Owl's Head, which has a good harbour on the larboard side in proceeding eastward.

Owl's Head Harbour makes with a deep cove. To sail in, bring a rocky point, which lies on your starboard side, to bear N.E. and a ledge of rocks that lie without that point, to bear E.N.E. and anchor in 4 fathoms, muddy bottom. You will lie open to the wind at E. by N. and E.N.E., but, with all other winds, are safe. The tide of flood here sets to the eastward, and the tide of ebb S.W. through the Muscle ridges.

Large vessels should not attempt passing between the Muscle ridges. The best channel is by *Tux-Bush Island*, leaving it on the larboard side, and steering E.N.E. or N.E. by E. about 2 leagues, when Penobscot Bay will be open: you may then bear away for either side of Long Island. If you pass to the westward of this island, your course will be N.N.E. to Great Spruce Head, which having passed, to the distance of 7 leagues, the course will be N.E. by N. 5 leagues, to Old Fort Point. In steering this course you will leave Belfast Bay and Brigadier's Island on your larboard hand. In proceeding for this island, which has a good harbour, keep the larboard shore on board. When you pass the island, for the Old Fort Point, which has no trees on it, observe, before you come to it, that an extensive ledge of rocks lies about three-quarters of a mile to the E.S.E. of it, which is uncovered at half-tide. These rocks are readily discoverable, when the wind blows by the breakers. You may pass within a cable's length of Fort Point in smooth water.

When bound up Penobscot River from Old Fort Point, with the wind a-head, and an ebb-tide, you may make a good harbour in the East River, which lies about E.N.E. one league from Old Fort Point. The entrance of this river lies to the south-westward of Waldow's Island, in which place you may lie safely from all winds, and anchor in 6 or 7 fathoms, good holding ground. You must leave Waldow's Island and several rocks, which are above water on the larboard hand. If requisite, you may anchor to the N.W. of the island on the starboard hand, before you pass through; but, with the wind and tide in your favour, you may proceed up to *Marsh Bay*, keeping the larboard shore best on board. Marsh Bay is about 2 leagues from Waldow Island. When passing the bay, keep nearly in the middle of the river, and you will have neither rocks nor shoals, until you arrive at the Falls. The exact course up the river is not exactly defined, but you will sometimes go to the westward, and sometimes to the eastward, of North.

When entering Penobscot Bay, and being bound to the eastward of Long Island, your course will be N.E. by N. leaving Long Island on your larboard hand. This course will carry you up to Bagaduce. If you intend going into this harbour, so soon as it bears E.N.E. you may run in, steering E.N.E. and keeping the middle of the channel on your starboard hand, until you pass the first island, giving that island a berth of half a mile; then haul to the southward until the island bears W.S.W. when you may anchor in 10 or 8 fathoms, muddy bottom, and lie safely from all winds.

In going into the harbour of Bagaduce, you will leave three islands on your starboard hand; but, if bound up Penobscot River, you must steer North, leaving the ledge of rocks off the Old Fort Point on your larboard hand, and then following the directions for running into Penobscot River, which will carry you up to the Falls. The tide rises, on full and change, about 10 or 11 feet.

KENNEBECK and SHEEPSKUT RIVERS.—If bound into Kennebeck River, steer for the island of Seagain or Segwiae, on which there is a lighthouse; then shape your course E. & N. leaving that island on your starboard hand, giving it a berth of about half a mile. So soon as Seagain bears South, steer due North for the entrance of the river. You must have regard to the tide, for the ebb sets out very strongly due South, directly on the island; therefore, if you have not a good breeze of wind, you cannot stem the tide, as it sets 4 or 5 miles an hour. In going into the harbour you will leave a large island covered with spruce trees on your starboard hand, and several other islands on the larboard. When you get to the northward of the first island,

island, if the tide be ebbing, you must steer for the *Two Sugar-Loaves*; these are two high rocks, which appear white, and resemble the figure indicated by their name;* when you pass to the westward of the *Sugar-Loaves*, you must steer W. by N., and, in case you are unacquainted, may anchor at *Parker's Flats*, on your larboard hand, in 4 or 5 fathoms: then take a pilot for the river, if bound upwards, as it should not be attempted without one. With day-light, and a fair wind, you may, however, go up as far as *McCobb's Mill*, which you will see on the west side of the river.

If bound to *Sheepscut River*, from the westward, and you make the island of *Seaguin*, you may leave that island on the starboard side, giving it a berth of half a mile; and, when you pass it to the eastward, you must bring it to bear S.W., and steer N.E. and N.E. by N. 3 leagues, which will bring you to *Ebenicook Harbour*: of this place the entrance is narrow, but it makes like a basin when you get into it. The entrance lies E. by N. You cannot get in here with a N.E. or easterly wind, but must have the wind south or westerly. After you get into the harbour, you must haul up N.E. or N.E. by N, as there are several sunken rocks, on the starboard hand, as you go in. There is anchorage in 4 fathoms, muddy bottom, safe from all winds.

But, if bound up *Sheepscut River*, in a large vessel, coming from the westward, you must go to the southward of *Seaguin Island*, steering about N.E. or N.E. by E. one league; and, when the river bears North or N. a little westerly, you may run north, and keep the starboard hand best on board. There are many rocks and ledges, some above and some under water, lying to the north-eastward of *Seaguin*: when you get up as high as *Ebenicook*, you leave the two *Mark Islands* on your larboard, keeping your course north, a little easterly. Here it is requisite to have a pilot.

HUSSEY'S SOUND.—If coming from the eastward of this place, and you make *Seaguin Island*, bring it to bear east, when you may steer west for the Sound, in case you have a fair wind and day-light; as there are islands on the starboard hand, between which the tide sets strongly. When within two miles of the Sound, you will make two islands, without trees, and called *Green Islands*. Continue your course until you make *Hussey's Sound*, bearing N.N.E., when you may steer in upon that direction. In this harbour 200 sail of vessels may lie safely in all winds; and, when wind and tide serves, you may be out to sea in one hour.

CAPE ELIZABETH and PORTLAND HARBOUR.—Upon *Portland Point*, which lies about 4 miles to the northward of *Cape Elizabeth*, there stands a lighthouse, built of stone, and 72 feet high, exclusive of the lantern; which is, of course, of the greatest utility on this coast. The sound or harbour of *Portland* is buoyed, and the following directions are to be observed when sailing in:

In coming from the south-westward, when within half a mile of *Cape Elizabeth*, the red buoy on *Broad Cove Rock* may be seen. This buoy bears N.N.E. from the pitch of the Cape, distant one mile and a half, and lies in 24 feet water. When advanced to it, leave it to the larboard, at half a cable's length, and steer N. by E. $\frac{1}{2}$ E. one mile, which will carry you up to the white buoy on *Trundy's Reef*, lying in 16 feet water: give this the same berth as the former. You may run N. by W. $\frac{1}{2}$ W. 3 miles, for *Portland lighthouse*; and, when up with the point upon which the lighthouse stands, give it a small berth; and steer N. by W. leaving *Bagg's* or *Bang's Island* on the starboard side, till you come to *House Island*, the S.W. point of which bears north from the lighthouse, distant about 2 miles. Before you are up with this island, the black buoy on *Spring Point Ledge* may be seen; it bears N.W. by W. from the S.W. part of *House Island*, distant half a mile, and lies in 14 feet water. When up with this buoy, you open the town; and, giving it a small

* See *Laurie and Whittle's large Chart of the Coasts between Halifax and New York*; which contains a particular Chart of *Kennebec and Sheepscut Rivers*, by *Capt. Joseph Huddart, F.R.S.* berth,

berth, you may haul up N.W. for the white buoy on *Stanford's Ledge*: the latter lies, also, in 14 feet water, and is one mile distant from Spring Point Ledge buoy. Giving the white buoy a small berth, you may keep midway up the river, and safely anchor off the town, at pleasure.

It is to be observed that, all the buoys, above mentioned, are to be left on the larboard hand when coming in. The depths above mentioned are at low water. Besides the above there are, also, two small buoys lying upon two ledges in *White-head Passage*, at the N.E. part of *Bagg's Island*: this passage is narrow, and seldom used by large vessels. By keeping midway between the two buoys, the red on the starboard, and the white on the larboard, when going in, you will not have less than 5 fathoms water. After passing the buoys, keep midway in the passage, and run to the distance of a mile, which will carry you into *Ship Channel*, the same as if you had passed the lighthouse.

Cape Elizabeth is about 4 miles south of *Bagg's Island*, and there is a ledge called the *Ten-foot Ledge*, or *Allen's Rock*, bearing E.S.E. 3 or 4 miles from the Cape, and about 3 leagues S.S.E. from the lighthouse. It has only 9 or 10 feet water over it; and, in rough weather, the sea breaks on it.

CAPE ELIZABETH to CAPE ANNE.

From Cape Elizabeth to Wood Island, on the south side of Saco Bay, the course and distance are about S.W. $\frac{1}{2}$ S. 8 miles; and thence to Cape Porpoise S.W. by S. 7 miles. The harbours formed by Wood Island and Cape Porpoise are to be attempted only with a pilot.

The course and distance from Cape Porpoise to Cape Neddock Nubble are S.W. $\frac{1}{2}$ S. 14 miles: between lies *Well's Bay*; and, close to the northward of Cape Neddock Nubble, is the Cape Harbour, which is a very small one.

THE WHITE HILLS.—The White Hills are, as represented on the Chart, an important land-mark to those approaching these coasts, as they may be seen many leagues off at sea, like a bright cloud above the horizon, and when no other land is in sight. They lie N.W. from Portland, and N.N.W. from Wood Island. They have been seen in latitude 43 deg. 10 min. at 46 miles from Cape Elizabeth, where there are 80 fathoms of water, muddy ground. If, from this spot, you steer N.W. or W.N.W. you will make *Agamenticus Hills*; which, when bearing W. by N. 6 or 7 leagues, appear to be three in number; the smallest being to the eastward. At the same time you will make *Well's Hills*; bearing W.N.W., and when on the northern part of *Jeffery's Bank*, in 45 fathoms, you will see the hills of *Agamenticus* bearing W. by N. or W.N.W.

BOON ISLAND, &c.—It is proper to recommend to those coming from the eastward, not to go to the northward of latitude 43 deg. 10 min. in thick weather, unless well acquainted with the coast, and certain that they are to the westward of Boon Island Ledges. Neglect of this precaution has proved fatal to many. The rocks, &c. about Boon Island will be found noticed hereafter.

Between *Jeffery's Bank* and the *Isles of Shoals* there are 70 and 75 fathoms of water, muddy bottom, and a strong current setting to the S.W. The *Isles of Shoals* may be seen 5 or 6 leagues off, when you are to the eastward of them; but in thick weather you will see the Meeting-house first, which is on one of the islands. (See a description of it hereafter.) If bound to the westward of these islands, as to Portsmouth, or Newbury Port, give them a berth of 3 miles, as a large rock, called *Innes's Rock*, which is uncovered before low water, lies 2 miles S.W. by S. from Star Island.

PISCATAQUA, or PORTSMOUTH HARBOUR.—The entrance of the harbour of Portsmouth is distinguished by a lighthouse standing on *Fort Point*, upon the western side, and upon which a light is exhibited.

In sailing from the S.W. to this place, having made Cape Anne, and being to the eastward of the *Dry Salvages*, bring them to bear S. by E., and steer N. by W. or N. $\frac{1}{2}$ W., on which course you will make the *Isles of Shoals*, and may thence take a new departure. Bring Star Island S.S.E., and then run N.N.W.; but, should the wind come to the northward, and you are obliged to turn into Portsmouth, stand to the westward no farther than to bring the light to bear north, until you arrive within *Odiornes' or Audien's Point*, when standing to the eastward, you should tack so soon as the light bears N.N.W. until you get within Wood Island. Be cautious of approaching *Odiornes' Point* when coming in from the south-westward, as sunken rocks lie off it to more than half a mile, which do not appear with off-shore winds. In standing to the eastward, be likewise cautious of the *Whale's Back*, which lies S.S.W. from Wood Island, and is covered at half-tide.

At the entrance of the harbour the tide flows, on full and change days, at a quarter past 11 o'clock.

Ships bound from this port, to the eastward, may steer S. by E. one league from the lighthouse, then N. E. by N. for Old York, or Cape Neddock; but, with a turning wind, must be cautious of *York Ledge*, which bears from *Sweet's Point* S.E. distant 2 leagues. There is also a sunken ledge, called the *Triangle*, lying S.W. one mile from *York Ledge*, which is never uncovered, but always breaks at low water. Some part of *York Ledge* is uncovered at half-tide.

Upon Boon Island, which lies S.E. from Cape Neddock, there is a high beacon, in the form of a lighthouse. A ledge of rocks lie one mile due north from this island, of which beware. There is, also, a very dangerous reef, bearing east one league from the island, and S.E. 5 or 6 leagues from *Agamenticus Hill*.

ISLES OF SHOALS.—*White Island*, the south-westernmost of these islands, is a rocky island three-quarters of a mile in length from S.E. to N.W. and about $\frac{1}{2}$ mile distant from the *Meeting-house* of Star Island. A reef extends about one-third of a mile from its N.W. end; to which a berth must be given when passing.

Londoner's Island lies about one mile and a half to the northward of *White Island*. It is about five-eighths of a mile in length from N. to S., and high at each end; but, at high tides, the middle is sometimes covered. This island is surrounded with rocks, some of which are always above water. The south end bears west from the *Meeting-house*, and the north end W. N.W. $\frac{1}{2}$ W. about half a mile distant.

Star Island, distinguished by its *meeting-house*, is about three-quarters of a mile in length from S.E. to N.W., and about half a mile in breadth; its north end is covered with buildings. The *meeting-house* stands on an eminence, a little to the northward of the middle of the island, fronting the west; the roof of this building is only 12 feet high, but thence to the top of the steeple, which stands on the middle of it, is 30 feet more; and the whole height, from the surface of the water, is about 65 feet. Being painted white, it may be seen from a distance of 8 or 9 leagues. It bears from *Thatcher's Island Light*, Cape Anne, (hereafter noticed,) N. $\frac{1}{4}$ E. distance 6 leagues; from *Newbury Port Lighthouse* N.E. $\frac{1}{4}$ E. 6 leagues; from *Portsmouth Lighthouse* S.S.E. $\frac{1}{4}$ E. 4 leagues; from the *Western Agamenticus Hill* S. $\frac{1}{4}$ E. from *Boon Island Beacon* S.W. $\frac{1}{4}$ S. 4 leagues; and from *Boon Island Ledge*, which lies one league East from *Boon Island*, S.W. by W. $\frac{1}{4}$ leagues. Off the south end of this island, at about three-quarters of a mile from shore, lies a rock, called *Anderson's Rock*, which is uncovered at half-tide, and should, therefore, have a good berth when passing. From the *Meeting-house* it bears S.S.E. There is also a rock, between this island and *Londoner's Island*, bearing from the *Meeting-house* N.W. by W. $\frac{1}{4}$ W. distant half a mile.

Cedar Island is the small island which lies to the eastward of *Star Island*; it is small, being only about one-quarter of a mile from east to west. The east end bears from the *Meeting-house* E. $\frac{1}{4}$ N., and the west end E. N.E. $\frac{1}{4}$ E. one quarter of a mile distant. Half a mile from the S.E. end of this island is a rock, uncovered at half-tide, which bears E. by S. from the *Meeting-house*.

Smully

Smutty Nose Island is nearly three-quarters of a mile in length from east to west, and about half a mile in breadth. It may be known by a windmill on its north part. At the west end is a fine harbour, called *Haley's Cove*, where fifteen or twenty small vessels may lie safely in all winds. There are several buildings near this place. Between the island and Hog Island, which lies to the northward, there is a fine channel, with sufficient depth of water for any vessel, by keeping nearly in mid-channel. The east end of *Smutty Nose Island* bears from the Meeting-house E.N.E. nearly one mile.

Duck Island is the northernmost of the Isles of Shoals. It is long, low, and rocky. Some parts are covered at high water, with rocks projecting in every direction, especially at the N.W. end, where a ledge runs off to the distance of half a mile. It is the most dangerous of the Isles of Shoals, and must be cautiously avoided. Its west end bears from the Meeting-house nearly N. by W. $\frac{1}{4}$ W. distant about $2\frac{1}{2}$ miles.

NEWBURY PORT.—The entrance of Newbury Port, or Newbury Harbour, is distinguished by two lighthouses, standing on the northern part of Plum Island. It lies nearly $7\frac{1}{2}$ leagues S.W. $\frac{1}{4}$ S. from Cape Neddock Nubble. If coming round Cape Anne, and at about 2 miles to the northward of the *Dry Salvage Rock*, before mentioned, bring it to bear S.E., and steer N.W. $4\frac{1}{2}$ leagues, which will bring it to Newbury Bar. In running for the bar from the eastward, strangers should not approach near Hampton Harbour, as off its mouth lies several sunken rocks.

Hampton Harbour lies about 5 miles north from the southern extremity of Salisbury Point; between, at the distance of 3 miles N. by E. $\frac{1}{4}$ E. from the lights on Plum Island, lies another dangerous rock, having only $3\frac{1}{2}$ feet water over it.

If you advance no farther westward than for the lights on Plum Island to bear S.W., no danger is to be apprehended from either of the rocks above mentioned; but that course to the bar would lead to the North breaker: you must, therefore, bring the lights to bear W. by S. and anchor in 11 or 12 fathoms water, should the tide not permit you to sail in. No vessel going in should approach the South breaker nearer than in 7 fathoms; or nearer the North breaker, in coming from the eastward, than 9 fathoms. Pilots are always ready when the weather will permit them to go out: but, if they cannot get out, you must keep the two lights in a line, and run for them until within a cable's length of the eastern light, when you must haul to the westward, and anchor between the two lights, in 4 fathoms; or you may bring the western lighthouse S.E. by S., and run N.W. by N. for Salisbury Point: but, so soon as you make that point, you must haul up N.W. which will carry you clear of *Badger's* Black Rocks and the Hump Sand.

Across the channel, from the Hump Sand to Black Rock creek, lie seven or eight piers, on which are from 7 to $2\frac{1}{2}$ feet of water: they were sunk in the year 1776, and still remain. The mark to pass between them is, to bring the beacon at the west end of the town over the south corner of the North Meeting-house.

The *Hump Sand* lies S.W. from Salisbury Point, which renders the channel very narrow and difficult to strangers. The *Badger Rocks* bear N.W. $\frac{1}{4}$ N. from the lighthouses, distant half a mile: they are covered at two-thirds flood, and are to be left on the starboard hand when going in. The *Black Rocks*, which are always dry, lie three-quarters of a mile N.W. from the lighthouses: these, also, must be left on the starboard hand. The *Half-tide Rocks* bear W. by S. $\frac{1}{4}$ S. from the Black Rocks, at the distance of a mile and a half; they are uncovered at half-tide, and have a buoy on them, which is to be left on the larboard side. Besides these there are the *North Rocks*, which are seen only at very low tides, and which bear W. by S. from the Black Rocks, from which they are one mile and a half distant: there is a buoy on them, which is to be left on the starboard hand, the channel lying between these and the Half-tide Rocks. When you pass the Black Rocks, a W. by S. $\frac{1}{4}$ S. course will bring you in the channel-way and good anchorage; and, even in the

the night or dark weather, when you judge yourself at about half a mile from the Black Rocks, you may anchor in safety.

It is always dangerous to run for this port in a gale of easterly wind.

ANNIS SQUAM, or SQUAM HARBOUR, in the south part of Ipswich Bay, The bar of this harbour bears from Halbut Point (the N.E. point of Cape Anne) about S.W. by W. 4 miles. In running from Halbut Point, be cautious of *Plum Cove Ledge*, which shews itself until nearly high-water, and bears from Squam light N.N.E. a little northerly, about five-eighths of a mile. Passing this ledge, you leave Hodgkin's Cove, which is deep, and a long point of land called Davis's Neck, on your larboard hand. When up with this neck, haul S.W. or S.W. by W. for Squam Bar. In sailing into this harbour, bring the light to bear due south; when at the distance of a mile from it, and run directly for it, leaving *Haradin's Rock*, which lies N. by E. $\frac{1}{2}$ E. from the light, distance three-eighths of a mile, on your larboard hand. Continue your course till within 50 yards of the light, then haul up S.S.W. for the Bar Rock, leaving the lighthouse on the larboard. The bar, which runs nearly N.E. and S.W., leaves the river about 90 fathoms broad opposite the light on the starboard. In running up, as here directed, you will leave the *Lobster Rocks* (which lie 200 yards S. by W. from the lighthouse, and dry at low water) on the larboard hand. When up with the bar rocks, which lie on the starboard hand, and are dry till nearly high water, steer S. by E. $\frac{1}{2}$ E. until you open the houses, and you may anchor in from $3\frac{1}{2}$ to 5 fathoms, clear sandy bottom: or run your vessel on shore, on the starboard side, should you happen to be without anchors and cables.

When the weather is so boisterous that boats cannot get off, a flag is hoisted on shore, near the lighthouse, so soon as there is a sufficient depth for vessels upon the bar, which may then run as above directed.

The *Salcozes*, before mentioned, bear from Halbut Point E.S.E. $2\frac{1}{2}$ miles distant; and from Cape Anne lighthouse, which stand on Thatcher's Island, N.N.E. 3 miles. Between them and Cape Anne there is a passage.

CAPE SABLE, of NOVA SCOTIA, to CAPE COD, PLYMOUTH, BOSTON, &c.

From Cape Sable to Cape Cod the course and distance are W. by S. about 70 leagues: in steering this course you will pass about 12 leagues to the southward of *Cashe's Ledge*, of which the following is a description communicated by the Master of His Majesty's sloop *Beaver*:

CASHE'S LEDGE.—"I took my departure from Thatcher's Island, about 2 leagues to the eastward of Cape Anne. The island bore north from me, distant 3 miles. From this bearing I steered E. $\frac{1}{2}$ N. with a fair wind, 65 miles, and fell in with the bank, where *Cashe's Ledge* is, about 2 leagues to the northward of the shoal, in 60 fathoms water; the soundings were a hard black clay. This bank extends from north to south 7 leagues, and from east to west 2 leagues. In the middle of the bank is the shoal mentioned: its length and breadth are about half a mile. It is rocky, and its soundings very irregular, having from 10 to 4 fathoms water in the length of a boat. You will have 17 fathoms water within a cable's length of it, deepening, as you stand from it, to 90 fathoms. As you approach the bank, you sound in from 60 to 35 fathoms, brown sand, with black stones and broken shells; then in 30 fathoms, it grows rocky. The current on the Ledge is exceedingly rapid and unaccountable. If the wind blows strongly, any vessel would founder, although she should not strike on it. The latitude of the ledge, by four days good observation, is 43 deg. 1 min. 0 sec. N. Note, as this is a very dangerous shoal, all ships should

should endeavour to keep clear of it. On the shoalest part there is 13 feet at low water."

It has since been said, by Mr. Backhouse, Master of his Majesty's ship *Porpoise*, that this ledge extends north and south 7 leagues; the shoalest part being near the centre of the bank, extending a quarter of a mile each way. The ledge, he observes, bears from Cape Anne E. $\frac{1}{2}$ N. 23 leagues, the shoalest part being in the latitude above mentioned. "You will have," he adds, "on this part from 10 to 4 fathoms, very irregular soundings, all rocky bottom. The current shifts all round the compass every hour, and runs at the rate of two miles an hour."

ST. GEORGE'S BANK.—As, in sailing to the southward of the course above described, or towards Nantucket, you may touch upon St. George's Bank, we annex the following remarks upon this bank, as given by Mr. Backhouse:—

"In going over George's Bank, you must depend on your latitude, and not cross it to the southward of 42 deg. 20 north, unless the wind be southerly, and clear weather, as Cape Cod is in latitude 42 deg. 7 min. north, and very low land. It is best to make Cape Anne in the winter season, which is in latitude 42 deg. 36 min. north. When you get within George's Bank, you will find very great ripplings, as if you had shoal water; at the same time you will have 90, 80, and 70, fathoms; the current chiefly sets towards Cape Cod."

"The shoalest part of the Bank lies 44 deg. 12 min. north, and has only from 14 to 4 fathoms, &c. in some places only 10 feet. The tide runs over it very rapidly, and sets about N.N.E. and S.S.W., and on the west side it is very steep to from 10 fathoms to no bottom, with the deep-sea line on the east side the soundings are regular."

"The S.E. part of George's Bank lies in latitude 41 deg. north, and longitude 66 deg. 30 min. west from Greenwich. I found it so several times in crossing from New York to Halifax. You will have, in a fair-way, from 35 to 45 fathoms, fine sandy bottom. Should you fall off more to the eastward, you will deepen your water to 60 or 70 fathoms, coarse sand: a N.E. course thence will lead you in a fair-way towards Shelburne lighthouse on the Nova Scotia coast."

CAPE COD to PLYMOUTH.—Cape Cod is distinguished by a lighthouse described hereafter, and the course thence to Plymouth Harbour is west, distant 7 leagues. This harbour may be known by a round hummock, lying on its northern side, called the *Gurnet*, upon which two lights are established; and, on its southern side, by a double high land, called the Monument. The Monument side is full of shoals and quick-sands, which dry in several places; but, on the Gurnet, or North side, there is a fair channel, in which you may ride safely with any wind but an easterly one. But, should an easterly wind happen to blow so hard as to force you from your anchor, you must run farther up the harbour, and anchor within the sandy island, called *Browne's Island*.

The Directions for this Harbour, as given by American Pilots, are as follow:—

The Harbour of Plymouth is capacious, but shallow; and is formed by a long and narrow neck of land, called *Salt-house Beach*, extending southerly from *Marshfield*, and terminating at the Gurnet-head, and by a smaller beach within, running in an opposite direction, and connected with the main land near Eel River, about three miles from the town. The lighthouses on the Gurnet are about 86 feet above the surface of the sea, and are so situated that they cannot be brought in a line to the northward, unless to those on shore.

From these lights the high land of the Monument bears S. $\frac{1}{2}$ W. 3 miles; Monument Point S.S.E. 2 leagues; Squash Head W. $\frac{1}{2}$ S. 3 miles; the easternmost part of Browne's Island or Shoal, which dries, S.S.W. 1 and $\frac{1}{2}$ of a mile; and the Gurnet Rock E. by S. $\frac{1}{2}$ S. one-third of a mile: on this rock are but 3 feet at low water, at which time all the soundings here mentioned were taken.

The Gurnet bears from the Race-point of Cape Cod W. $\frac{1}{2}$ S. about 6 leagues. It is proceeding

proceeding for Plymouth, so soon as you have shut in the sandy hill with the Gurnet-head, you will be clear of the Gurnet Rock: after which you must be cautious of hauling close to the head, as there are many sunken rocks at some distance from shore. When you have brought Squash-head to bear W. by N. you may steer W. by S., and, if bound for *Plymouth*, you must keep that course towards a large red cliff on the main, which is a very good mark for leading clear of *Dick's Flat*: you will then steer more southerly for *Beach-point*, or run up till you are abreast of *Squash-head*, giving it a distance of one quarter of a mile. Then steer W. by S. $\frac{1}{2}$ S. which will carry you clear of *Dick's Flat* directly for *Beach-point*, keeping within 15 or 20 yards of the sandy point as you edge away to the southward, until you have shut in the lights, where you may anchor in 3 or 4 fathoms; but the channel is very narrow, having nothing but a flat all the way to *Plymouth*, except this small channel, which runs close to the neck of land, and in which you will have 4 or 5 fathoms close to the sandy point.

If bound into the *Cow-yard*, steer as above directed, which will lead clear of *Dick's Flat* and the muscle-bank; observing to keep the house on the Gurnet-head just open with *Squash-head*, until you have opened the high pines with *Clerk's Islands*; then you will be clear of the muscle-bank, and may steer N.W. until you have 3 fathoms at low water.

In turning into *Plymouth*, you should not stand to the northward into less than 3 fathoms, as it runs flat a long way off from the Gurnet-head to *Squash*; and off both the heads a point of rocks extend to a considerable distance from shore, many of which are nearly uncovered at low ebbs. There is shoal water also all the way from *Squash* to the muscle-bank; so that you should not stand into less depth than that above mentioned: and, in standing towards the sands to the southward, you should tack in 4 fathoms, as it is steep-to, and you may observe the rips unless the water be very smooth. The shoal extends from abreast of the lights to *Beach-point*, and the greatest part of it is uncovered at low ebbs.

In coming from the southward for *Plymouth Harbour*, you must not open the northern light to the westward, but keep them in one, bearing N.N.W. $\frac{1}{2}$ W., which will carry you into 5 fathoms, by the easternmost part of *Brown's Island* or Shoal, keeping that course until you are within half a mile of the Gurnet-head, or nearly, where you will have but 4 fathoms: *Squash-head* will then bear W. by N. a little northerly, and the two outermost trees on the head be in one; when you may stand directly for them, until you bring the lighthouse to bear E.N.E., and the house on *Squash* N.W., just open with the first sandy beach, where you may anchor in *Squash road*, in 4 fathoms, good clear bottom; but, if bound to *Plymouth*, or the *Cow-yard*, you must steer as before directed.

Should you fall in to the southward of *Brown's Island* or Shoal, between them and the Monument land, where, in some places, you will find 20 fathoms, you must not attempt to run for the lights, until you have brought them on with each other, bearing N.N.W. $\frac{1}{2}$ W.; for, if you do, you will run on *Brown's Island* or Shoal, as there is no passage even for a boat at low water.

In coming in from the northward, for *Plymouth*, you should not bring the lights more southerly than S. by W., as thus you will avoid the high pine-ledge, which lies north 24 or 3 miles from the Gurnet-head. The shoalest part of this ledge, which is uncovered at low ebbs, lies about $1\frac{1}{2}$ mile from the shore, with the high pines in range with *Captain's Hill*, which will then bear W. by S. It extends N.N.E. and S.S.W. nearly a mile, and has 4 or 5 fathoms close to it, which deepens gradually as you run to the eastward from it, having 10 to 12 fathoms at the distance of a mile.

By night, with the lights bearing S. by W., proceed to the southward until they bear N.W., or N.W. by W., when you will be clear of the rock, and may steer up W. by S. until you have the lights bearing E.N.E., when it will be prudent to anchor until day-light.

The tides flow in *Plymouth* until nine o'clock, on the full and change.

Should

Should you make the Gurnet lights in the night during hard northerly or north-west winds, and cannot get into the harbour of Plymouth, you may run for that of Cape Cod, the point at the entrance of which bears from the Gurnet lights E. $\frac{1}{2}$ S. about 10 miles. It is hold-to, and, unless it be very dark, you may see the sandy hills before you can get on shore.

CAPE COD to BOSTON.—From about a league off Cape Cod, your course to Boston Light-house is N.W. by W. $\frac{1}{2}$ W. and the distance 13 leagues. The light-house, which is 65 feet high, stands on an island at the north entrance of the channel. When you make the light with a fair wind, bring it to bear W. by N. or W.N.W.; then steer for it until you are within two cables' length distance: come no nearer to it, but run in until it bears N. by E.; you may then steer W. by S. about $1\frac{1}{2}$ mile, for Nantasket Road, where, if the weather be so bad as to prevent your getting a pilot from the island, you may anchor, and ride in safety.

If the wind be contrary, you may stand to the southward till you bring the light to bear W. N.W. and to the northward till it bears W. S.W. until you come within 3 miles of it; then you must not stand to the northward any farther than to bring the light to bear W. by N., nor to the southward than till it bears W. N.W.; you may safely anchor in the bay, if the wind be off the shore.

From Cape Anne to Boston Light-house, your course is S.W. and the distance 8 leagues. The light-houses at Cape Anne stand on Thatcher's Island; when they bear S. by W. $\frac{1}{2}$ W. from you, they are on with each other. To go clear without Thatcher's Island Ledge, you must keep about 3 miles distant from the light-house. In thick weather, a gun will be fired from the lighthouse, to answer any signal which may then be made.

Note, when you proceed from Cape Cod for Boston Bay, with a flood-tide, you should steer about one point to the northward of the before-mentioned course, because the flood sets into Barnstable Bay: this precaution is the more necessary, when the wind is northerly. You are to be equally careful in steering from Boston Bay to Cape Cod.

Directions for Sailing by CAPE COD LIGHT-HOUSE.

(Published by the Boston Marine Society, for the benefit of their sea-faring brethren, 1800.)

"By order of the United States, a Light-house has been erected at the Clay Ponds, on Cape Cod. The house is erected on land elevated about 150 feet, which, with the elevation of the lantern, makes the whole height 200 feet above high-water mark: In order that this light may be distinguished from the Boston and other lights on our coast, an ecliser is erected, which will revolve round the lamp once in 80 seconds; so that the light will be nearly excluded from the eye of the approaching mariner, about 30 seconds in one revolution of the ecliser. To render the benevolent designs of Congress as extensively useful as possible, the Marine Society at Boston, by a large committee from their body, whose views have been seconded by others, have taken such bearings and distances as they thought necessary; which observations, giving light and safety, are added for the benefit of all interested, and are as follow:—

If outward-bound from Boston Light-house, and you would wish to fall in with Cape Cod, the course is E.S.E. 15 leagues; thence 3 leagues to the Light-house. When up with the light-house, and it bears S.W. 2 leagues, you may then steer S.S.E., which will carry you out of the south channel.

If inward-bound, and you want to fall in with the back of Cape Cod, bring the light to bear W. 2 leagues distant; then steer W.N.W. for Boston Light-house.

If you wish to go into Cape Cod Harbour, you may keep the shore aboard about a mile

a mile distant, where you will have 10 fathoms. There is a bar that lies off the back of the Cape, about half a mile from the shore.

Race Point is very bold, and may be known by a number of fish-houses on it, and is about three leagues to the westward of the light-house. From one to three miles to the southward of Race Point, is what is called Herring Cove, where you may have good anchoring half a mile from the shore (the wind being from E. to N.N.E.) in 4, or even in 3, fathoms.

If bound into Cape Cod Harbour, your course, from Race Point to Wood End, is S.S.E. 6 miles; bring the light to bear E. by N., and run for it about 2 miles; you will then be clear of Wood End: then you must steer N.E. until the light bears E. by S.; then run N.W. for the harbour, until you have from 4 to $3\frac{1}{2}$ fathoms, where you have good anchoring; the light will then bear E. by S. $\frac{1}{2}$ S. 5 or 6 miles.

In running from Race Point to Wood End, after you pass the black land, or hummocks, you will come up with a low sandy beach, which forms the harbour, extending between 2 and 3 miles to Wood End, which is difficult to be distinguished in the night: it is very bold: you will have 25 fathoms within half a mile of the shore.

In beating into Cape Cod Harbour, you must keep the eastern shore on board until you get into 5 fathoms: standing no farther to the westward than to bring the light to bear E. by S. as there is a long spit of sand running off from the western shore, which, being very bold, you will have 11 fathoms within a stone's throw of the shore.

In case it blows so hard, that you cannot beat into the harbour, you will have good anchorage without, from 10 to 15 fathoms.

If in Boston Bay, and you wish to put away for Cape Cod Harbour, you must endeavour to fall in with Race Point.

If in the night, and you cannot see the land, you must bring the light to bear E. by N. and run for it until you have soundings in 14 or 15 fathoms; then steer N.E. until the light bears E. by S. then run in N.W. for the harbour.

At full and change, it is high water off Race Point at 10 hours and 45 minutes. On leaving Cape Cod, if bound for Boston, you must calculate the tide, as the flood sets strong to the S.W."

Directions for Sailing in and out of BOSTON BAY, from CAPE COD and CAPE ANNE. By Mr. KNOX, Branch-Pilot.

BOSTON LIGHT-HOUSE stands on an island at the north entrance of the channel, 65 feet high. To steer for the light from Cape Cod, your course is W. N.W. from within one league of the Cape: the distance to the light 16 leagues.

To steer for the light from Cape Anne, your course is S.W. distance 10 leagues.

After making the light, the wind fair, bring it to bear W. by N. or W. N.W. then run for it till within two cables' length of it: come no nearer, but run by it, till it bears N. by E. then you may run W. by S. about $1\frac{1}{2}$ mile, to Nantasket Road, where you may anchor in safety (if the weather is so bad as to prevent a pilot coming off the island).

To work into BOSTON BAY, &c.

Stand to the southward till you bring the light to bear W. N.W., and to the northward till it bears W. S.W., till you come within one league of it: then you must not stand to the northward any farther than to bring it to bear W. by N., and southward till it bears W. N.W., you may anchor in the bay in safety, if the wind be off shore.

The

The lighthouses of Cape Anne stand on Thatcher's Island; the two lights appear in one when they bear S. by W. $\frac{1}{4}$ W. from you.

To go outside of the Londoners, (or Thatcher's Island Ledge,) you must give the light one league distance.

A cannon will be fired at the lighthouse to answer any signal in thick weather.

Remarks by Mr. OSGOOD CARLTON.

In coming into Boston Bay from Cape Cod, flood-tide, the wind northerly, there is danger of being carried more southerly than you steer, by the tide's setting into Barnstable Bay; in such case it will be necessary to steer about one point more northerly than the above directions, either coming in or going out.

Note, these directions are agreeable to the common compass, which varies in the bay between 6 and 7 degrees westerly; but, as this variation alters, the true variation should be often ascertained.

Sailing Directions for the HARBOUR of BOSTON, &c.

The lighthouses on Cape Anne and Cape Cod bear from each other S.S.E. $\frac{1}{4}$ E. and N.N.W. $\frac{1}{4}$ W. distant 14 leagues. From Cape Cod to Boston Lighthouse, the course is W.N.W. 16 leagues; and from Cape Anne it is S.W. 11 leagues. Until you come within two leagues of Boston Lighthouse, you shoalen your water from 35 to 19 fathoms. The soundings are irregular. On the Cape Anne shore, the bottom is rocky, and fine white sand towards Cape Cod. On the days of the full and change of the moon, it is high-water off Boston Lighthouse at ten o'clock. It flows off the town till a quarter of an hour past eleven. The spring-tides rise 16 feet perpendicularly; neap-tides 12.

To sail in during Night, or turn within the Lighthouse Anchorage.

COMING from sea in the night, bring the lighthouse to bear west, and steer for it; observing to incline your course southerly as you approach, in order to give a berth of two cables' length to the Light-house Island. When you are abreast of the light, shape your course west, until it bears from N.N.E. to N.E. Here, if not acquainted with the harbour, you may anchor till day-light. With the wind between the S.W. and the N.W. quarters, a ship may, in great safety, turn up within the lighthouse anchorage, taking care not to stand farther southward than to bring the lighthouse to bear W.S.W., nor farther northward than W.N.W.*

SALEM HARBOUR.—The entrance of Salem Harbour is distinguished by two lights, on Baker's Island, near the middle of the entrance; these lights are 40 feet asunder, and bear, when in a line, N.W. $\frac{1}{4}$ W.

If bound into this harbour, and you fall in with Cape Anne, supposing Cape Anne lights to bear N.N.W. about two miles distant, your course will be W.S.W. about 3 leagues, then W. by S. 7 or 8 miles, which will bring you in sight of the lights on Baker's Island.

But, should you fall in to the southward, when proceeding for the lights, you should, so soon as you have made them, bring and keep the northern light open to the southward of the other, and thus run for them: this will carry you to the eastward, and clear of the south breaker of Baker's Island, which is very dangerous, and bears from the lights S.E. by S. 2 miles distant.

* For the best Directions for sailing to Boston, &c. see Laurie and Whittle's Sailing Directions for the American Coast, from Halifax to Florida.—New Edition, 1810.

Should the wind be westerly, when beating up, you should not stand to the southward or westward farther than to shut one light in with the other; otherwise you will be in danger of the south breaker above mentioned: neither stand to the northward farther than to bring the lights W. by S. $\frac{1}{4}$ S. or you will be in danger of *Gale's Ledge*, a ledge which bears from the lights N.E. by E. one mile and three-quarters distant.

The Common or Ship Channel into Salem is between Baker's Island and Misery Island. It is about a mile wide; and you may, so soon as you are up with Baker's Island, pass within 100 fathoms of it, and steer W. by N. for the *Haste*, a broken rock above water, which lies near the middle of the channel, with Baker's Island W. by N. $2\frac{1}{2}$ miles, and at one mile and a quarter from Salem Neck. This course will lead clear to the southward of *Hardy's Rocks*, a ledge covered at high water, and to the northward of *Bowditch's Ledge*.

From mid-channel, between Baker's and Misery Islands, you may steer W.N.W. till you have passed *Bowditch's Ledge*, or until *Cat Island* comes open to the westward of Eagle Island; then haul up for the *Haste* above mentioned.

You may anchor safely in 5 fathoms; but to proceed farther, pass the *Haste* at the distance of about half a mile on the larboard, and steer S.W. by W., which will carry you to the harbour. Observe, however, that a rocky ledge stretches from the N.E. end of Winter Island, and that a rock, called *Abbot's Rock*, lies abreast of it, to avoid which keep a quarter of a mile from shore. This rock has 7 feet over it at low water, and lies with Castle-hill and house into the cove N. of Port Pickering, and Beverley Meeting-house well in with Juniper Point, the S.E. point of Salem Neck.

Be cautious, when keeping off shore, in order to avoid *Abbot's Rock*, that you do not go so far as to get on the *Aqua-vita*, sunken rocks lying E.S.E. nearly half a mile from Fort Pickering.

Should you, when coming from the south-eastward, find yourself near the *Half-way Rock*, you may bring it S.E., and steer N.W. for the *Haste*, passing near *Satan* or *Black Rock*. The latter is steep-to, and bears S.W. by S. one mile and three-quarters from Baker's Island. It should be left on the larboard hand, and the *Brimbles* and *Eagle Island* on the starboard. By continuing this course you leave the *Haste* on the larboard, and enter the Ship Channel, whence proceed as above directed. Common tides here rise about 12 feet.

THE END.

uth-
you
rth-
of
reo.

very
er's
ken
land-
urse
ter,

.W.
est-

e at
will
rom
east
feet
Port
oint

you
half

half-
atop
reco
the
eave
bove